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ORIGINAL ARTICLES.

PHYSIOLOGICAL DIETETICS.

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FIRST ARTICLE.

GENERAL SUBJECT.

ONE of the most important topics comprehended within the domain of biology is that of *physiological dietetics*. Perhaps the term "physiological hygiene," as opposed to "pathological hygiene," might be more accurately applied to it, but the one we have chosen will suffice to denote our purpose in the present article—that, viz., of first presenting an outline of the latest theories respecting the nutrition of the human body in general; and, secondly, passing in review the various factors which contribute to that nutrition, so as to clearly demonstrate that the influence of diet may be physiological, or directly promotive of health, as well as pathological, or disease-producing.

At the outset of our inquiry, we must recognize the general fact that every living organism is an aggregation of molecules, possessing characteristic properties and performing peculiar functions, and that its continued existence as an individual depends upon an adequate supply of the pabulum which is essential to its support. The distinctive processes primarily carried on by such an organism are, first, the formation, from the elements, carbon, hydrogen, oxygen and nitrogen, of the substance known in animal chemistry as *protein*—and which, with a goodly proportion of water, is the main constituent of the so-called "protoplasm," and, second, a constant disintegration of the tissues thence resulting, and their concomitant reproduction through the reception of new material.

It is said that "a process of waste resulting from the decomposition of the molecules of the protoplasm, in virtue of which they break up into more highly oxidated products, which cease to form any part of the living body, is a constant accompaniment of life. There is reason to believe that carbonic acid is always one of these waste products, while the others contain the remainder of the carbon, the nitrogen, the hydrogen, and the other elements which may enter into the omposition of the protoplasm."

One of the functions of living matter is that which regulates the material composing the body and determines quantitively the processes of waste and those of assimilation. "The physiological activities manifested by this complex whole, represent the sum, or rather the resultant, of the separate and individual physiological activities resident in each of the simple constituents of that whole."

"The sustentative functions can only be exerted under certain conditions of temperature, pressure and light, in certain media, and with supplies of particular kinds of nutritive matter; the sufficiency of these supplies, again, is greatly influenced by the competition of other organisms, which, striving to satisfy the same needs, give rise to the passive 'struggle for existence.'"

Broadly speaking, the animal body is a machine for converting potential into actual energy. The potential energy is supplied by food, and this is converted into the actual energy of heat and mechanical labor.

The latest physiological investigations have shown that although the body consists, like the food, of proteids, fat, and carbo-hydrates, yet the conversion of the one into the other is not direct. Assimilation does not proceed in such a way that the proteids of the food all become the proteids of the body, the fats of the food the fats of the body, and the starch and sugar of the food the glycogen, dextrine and sugar of the body. We cannot even say that the non-nitrogenous food supplies alone the non-nitrogenous parts of the body, while the nitrogenous food remains as the sole source of the nitrogenous tissues.

We have abundant evidence that the various food stuffs become more or less metabolized and their constituents more or less rearranged and mixed, before they appear as components of the bodily tissues.

One of the principal agencies in the production of these changes is that of water. This, to a greater or less extent, enters into the composition of all nutritive substances, but the system, in dealing with most of them, requires also to be supplied with it in a separate form.

Thus, a diet largely nitrogenous will tax the system severely unless a considerable quantity of water be taken for the purpose of getting rid of the waste. It is estimated that the entire quantity of water daily removed from the system is about four and one-half pounds, and since there is no evidence of latent sources for the production of the fluid within the

organism, it is clear that an equivalent amount must be introduced. According to Dalton, a full-grown male requires 52 fluid ounces daily. It should also be remembered that 75 per cent. of the human body is composed of water. All organized structures contain a certain proportion of water, and this is absolutely necessary to the due performance of their functions as well as to the proper consistence of all their parts. Of course, the evils arising from an over-preponderance of fluid in the system, and a consequent diminution of its solid elements, should be guarded against. These evils, however, are undoubtedly far less than those which arise from the opposite condition. Thus, the almost universal neglect to provide children with cold water to drink has been set down, on good authority, as one cause of the frightful mortality from infantile diseases. In such cases, owing to excessive temperature, or profuse perspiration, the necessary supply of water is withdrawn from the system, thirst ensues; the child cries; food is given instead of the desired water; the stomach refuses to digest it, and it aggravates the disease by acting as an irritant. It is, therefore, doubly cruel, especially in hot weather, not to offer children cold water at frequent intervals—no matter how they are being fed. Allay its thirst with nature's diluent, and the child will refuse food which is not required, or is unsuited in quantity or quality to its digestive powers.

The earliest rational doctrine of nutrition was propounded by Liebig. In his researches on the food of plants, this celebrated chemist showed that we could learn from the composition of the vegetable ash what minerals entered into the constitution of the plant, and by supplying them in the right proportions, enable almost any soil to carry any crop. From this he reasoned to the animal, with this difference, that the latter must have its food provided in the complex organic forms of the albuminates, carbo-hydrates and fats. Since nearly all tissues contained nitrogen, it was evident that they could be built up and restored only by nitrogenous materials; that is, that albuminates alone could be applied to tissue formation. So far, Liebig was right; but when he began to speculate as to the actual processes of nutrition, he went wrong.

Recognizing in metabolism the only source of functional activity, he assumed that each organ, in the exercise of its functions, consumed a certain proportion of its substance, and that, consequently, albuminous nutriment must be provided in direct proportion to the activity put forth. Albuminates he distinguished as plastic or flesh-forming foods; fats and carbo-hydrates he considered to be no more than fuel for the production of heat, and he therefore called them respiratory food.

It was Voit who demolished this whole theory, by showing that albuminous metabolism is not increased by exercise, and that the albumen metabolized by a fasting animal is insufficient, even when combined with the due proportion of carbo hydrates and fats, for the maintenance of life; while severe muscular exercise does not augment the secretion of urea, though it does that of carbonic acid enormously.

Voit's experiments clearly point to the conclusion that the greater part of the albumen taken in the food is accumulated *pro tempore* in the general fluids of the body, whence so much is withdrawn by the tissues as is required for their repair, and that this fluid albumen is far more readily metabolized than that which has already entered into the structures. In health, a certain amount of albuminous food above the actual needs of the tissues—in other words, an ample stock of albumen dissolved in the juices of the body—appears necessary to great functional activity, and to afford the power of resisting injurious influences, as exposure to the elements or to disease, but if the ingestion of albumen be continued in greater excess, the surplus is immediately subjected to metabolism, the excretion of urea depending on the albumen ingested, and not on the amount of muscular activity, as Liebig supposed. Probably some portion of the albuminous food taken is split up, the N escapes from the system as urea, CON_2H_4, leaving roughly about two-thirds of its original weight, consisting of CHO, to be stored up as fat or glycogen, or oxydized in the system, supplying mechanical energy or heat, and escaping as CO_2 and H_2O. Albumen alone can maintain life, though not health, for a considerable time, and can thus replace the fats and carbo-hydrates, whereas the converse is not the case.

The impulse to metabolism seems to proceed from the cells themselves, and to be more of a vital than a chemical character, the oxygen combining rather with the products of the splitting up of the food stuffs than directly and primarily with them, as Liebig taught. It follows that there is little or no relation between the facility with which any given substance combined with oxygen—*i. e.*, burns—in the air, and under the totally different conditions under which it finds itself in the animal body. Thus, while alcohol, the most combustible out of the body of all foods, but by no means the most easily metabolized in it, in large doses depresses that action and lessens tissue change, albumen, hard to burn, but most easy of metabolism, excites it almost in direct ratio to the quantity ingested, or rather to the proportion it bears to the other food stuffs. Moreover, as to the physiology of digestion, the progress of the past score of years has added mightily to our former crude notions. From the simple idea that albuminous substances

were all alike, their number has multiplied, each presenting attributes sufficiently marked to make them separately recognizable; and similarly in contrast to the former opinion that this one albumen, when changed into albuminose, as it was formerly called, constituted the great assimilable albuminoid body, we now know many which, under the generic title of peptones, constitute quite a group of assimilable substances.

It is well established that the gastric, the pancreatic, and the intestinal juices, each in succession from above downward, acting upon the food, each in turn has an action which results in the conversion of albuminous compounds into different peptones. At one time it was thought that the peptones were themselves products of decomposition, but this view has been proved erroneous, and still further, it has been shown by Poehl, Heniger and others that they are easily reconvertible into albumen.

A recent investigator has found that, when the mucous membrane of the stomach has been removed, the glands of the large intestine are capable of digesting flesh, raw and cooked eggs, as well as other finely divided albuminous foods that are easily decomposed by the secretions.

The starches are converted into dextrine and sugar by the action of the saliva, pancreatic and intestinal juices, and being thus rendered diffusible, enter the portal vein and are conveyed to the liver. The liver probably converts the sugar into glycogen, and stores it up till required to be oxidized for the production of heat and muscular energy.

The fats are crushed and reduced to pulp in the mouth, and their fibrous tissue and vesicular envelopes dissolved in the stomach, so that the oily matters are set free. In the small intestine they are emulsified and saponified, after which small quantities of the fatty matters find their way into the portal vein, but by far the major quantity enters the lacteals of the villi. Finally, the fatty matters forming the chyle pass through the mesenteric glands and into the receptaculum chyli and thoracic duct. Voigt finds that the bile plays a most important part in the absorption of fat. Zawarykin has noticed the lymph-cells and leucocytes taking up the fatty granules by a sort of ameboid movement, and in this way carrying the fat into the blood.

In the language of Fothergill, "all digestion is a process of solution by hydration—*i. e.*, as starch is converted into sugar by adding a molecule of water to it, under the action of a ferment, so the albuminoid proteid is converted in the stomach into a 'peptone' by a like process of hydration. It is easy to see that our food could not well be stored in soluble form by the vegetable world, which, from ammonia, water and carbonic acid builds up for us starch, sugar, albuminoids and fats. If soluble in water they would constantly be dissolving in rain. So they are insoluble, and the digestive act renders them soluble, so that they can pass from the intestinal canal, through its walls, into the blood first, and from it again to the viscera and tissues. Let us take the career of starch. The act of bursting the starch granule open by cooking is a preparatory act of no little value in lessening the demand upon the digestive processes. This is illustrated by the practice of advanced agriculturists who cook the starchy matters of the food of their stock, or ferment them by brewers' grains. Under the influence of the ferment of the saliva starch is converted into sugar. This ferment is known as 'diastase,' and an identical ferment is produced in the process of malting barley, where the starch of barley is 'hydrated' into malt." The writer then goes on to affirm that "diastase —whether of saliva or barley it matters not—is inactive in the presence of an acid, and taken into the acid stomach is inert, simply thrown away, so far as it is a ferment, and reduced to the level of other food —no longer a digester, but itself to be digested. It is in the brief time before starchy matter reaches the acid stomach that the diastase is active and functionally operative." These latter statements, although emphasizing teachings which have long passed unchallenged among physiologists, are undoubtedly erroneous. Recent experiments have established beyond controversy that both salivary and malt diastase exert their greatest diastatic power in the presence of acid, and that even excessive acidity or alkalinity of the fluids of the stomach, liable to occur in disease, interferes much less with the diastatic action of malt extract than with that of the saliva. But the practical lesson which Dr. Fothergill deduces from this piece of physiological misinformation, is just as valuable as though based upon a correct position. This lesson is "that children and dyspeptics, as well as invalids, should take their food slowly. It should not be bolted, even when simple milk and porridge; it ought to be well chewed in the mouth and thoroughly mixed with the saliva." And this brings us, as well as our learned authority, "to a matter upon which a few words may be said with advantage. All digestion is a process of solution, but for perfect solution disintegration is essential. The food, whether starchy, albuminoid or fat, must be reduced to minute particles before the ferments can act efficiently. We grind our grain before we cook it. We disintegrate it before it is subjected to a process which chemically affects it—that is, so much digestion is actually performed upon the food before the digestion of the body is brought to bear upon it. So we cook our flesh in order to make it less tough, *i. e.*, in order to make the tiny fibrillæ of the muscles fall more

readily asunder. This reduces the act of chewing very considerably, and so reduces the work of digestion. Cooking and mastication, then, lessen the labor of the stomach in disintegration." With regard to the latter process, a few curious and important points deserve to be noted before this portion of our subject is brought to a close. We find that man, the world over, has a distinct liking for *hot food*, to gratify which himself and his womankind are put to the trouble of daily cooking. Even bread is eaten hot by the majority of mankind ; and very few races habitually eat anything cold, except when hot food is unattainable or expensive. And yet, except in this one particular, the taste for pleasant food is certainly neither deep nor widespread. If it were, an art so important as that of cookery would not have been left by the millions of laboring men so entirely to traditionary teachings ; they would have developed it in a way they have not done, and would have combined to secure pleasant meals in a style they carefully avoid. Among the immense majority of mankind each household cooks for itself, the work falling mainly on the wife, who is never taught except by her mother, and in the most traditionary way. Improvement, if any is ever made, is exceedingly slow, and among some nations popular cookery has probably even retrograded. A new article of diet is occasionally added, like the potato, or a new condiment, like pepper ; but it is doubtful if the average laborer's dinner is made a bit more palatable than the dinner of an Israelite was when the law-givers promulgated the curious notion that roast meat was more acceptable to the superior powers than meat boiled or stewed. Although the natural way with a civilized people, if they cared for nice food, would be to intrust the preparation of it to professionals, it is only in the making of bread that men combine, and over the greater part of the world they have only begun to do that. Yet the world everywhere combines in order to get its drinks, and the things it drinks gradually but quite steadily improve. Nobody in Germany, America or England would now swallow the horrible home-made stuff which our ancestors called beer. Man does not, as a rule, even know what is good for his health, takes no trouble whatever to circulate knowledge on the subject, and seldom lays down inflexible laws on eating, and when he does, they are not sanitary laws. There are fifty lecturers in Europe and America on the abuse of alcohol for one on the abuse of food, and careful instruction on the comparative nutriment in different edibles, the value to health in thorough cooking, the relation of sugar to the diet of children, and the aid which certain diet would give to the formation of bone would be probably thrown away. The general run of people will never learn cooking until they are brought to take an interest in the subject—and that, we believe, can only be done by incessantly pressing the argument of health.

The multitude everywhere care little what they eat so they be but filled, but they do care to be healthy, and above all that their children should grow up strong. It is the gain to be obtained from good food, not the enjoyment to be expected from it, which will ultimately attract the millions, and we wish the work of persuading them that good cookery can be made gainful could be begun. They will not grow properly discontented on the subject until they know that their strength depends mainly on their diet, and diet in an immense degree on certain ideas of cooking. Let the sedentary trades, for example, just learn what half-baked bread means—and much of the bread eaten in our country is half-baked—and they will alter that particular evil within a month. And they will cease to reject an article of diet like gluten flour, the most healthful and nutritious of all foods—a food with every good property at once of wheat and of alcohol, because they have not an idea how it should be cooked, when, with a little care and intelligence, it can be made most palatable.

But not only do the "multitude" require to be disabused of errors such as these, but even among the wealthier and more intelligent members of the community many "dietetic delusions" will be found to prevail. Every intelligent physician is aware that his aid is frequently sought for the relief of symptoms which are entirely due to insufficient alimentation. As Dr. Hodges puts it in a recent paper: "The underfed constitute so considerable a class, that a large part of medical practice is devoted to attempts at satisfying their importunate demands for something that shall make them feel better. The futile use of iron, quinine, bitters, elixirs and other so-called tonics, either when self-prescribed or methodically directed by physicians, and the insuccess of medicines, as a rule, to relieve the wearisome complaints daily listened to from persons whose mode of living is an injustice to themselves, do not always serve as a reminder that suitable nutriment, in some form or other, is the only real tonic, and that its methodical consumption can alone relieve the protean afflictions of many if not most of these querulous supplicants. To say to them in a vague and general way that a nourishing diet should be taken, and that anxiety and overwork are to be avoided, is to give weak advice. The most rigid and literal obedience to fixed and precise rules in regard to the quantity and character of the food and the time of taking it —in fact, the carrying out of a process of stuffing practiced at short intervals of time, without regard to appetite, and pushed to the stomach's maximum capacity of digestion—is necessary to extricate them from their deplorable situation."

The practice so generally condemned of eating shortly before going to bed, should be regarded, on the whole, as rather beneficial than otherwise. "If the ordinary hour of the evening meal is six or seven o'clock, and of the first morning meal seven or eight o'clock, an interval of twelve hours or more elapses without food, and for persons whose nutrition is at fault, this is altogether too long a period for fasting. That such an interval without food is permitted explains many a restless night, and much of the head and back ache, and the languid, half-rested condition on rising, which is accompanied by no appetite for breakfast. This meal itself often dissipates these sensations. It is, therefore, desirable, if not essential, when nutriment is to be crowded, that the last thing before going to bed should be the taking of food."

The nutritive value of soups is unquestionably overestimated by the popular mind—though they should not be wholly condemned, since much depends upon the manner in which they are prepared. As a rule, they are only a sort of meat tea, having a nutritive value not unlike that possessed by urine, to which they are chemically similar. On the other hand, the much calumniated sausage, in Dr. Hodges' opinion, is, in winter time, "one of the most useful and successful articles for frequent food." He advises that it be taken cold.

A great many people fancy that milk is unsuited to an adult stomach which is at all delicate. The fact is, that it is often too poor but never too rich, for purposes of enforced nutrition and as to digestibility it is unrivalled by any other sort of food.

It is an encouraging sign that men of the highest scientific standing are beginning to insist upon the necessity of more liberal feeding, both in health and disease. We have often heard young ladies decline to eat meat, because it rendered the skin "gross," and yet this class most frequently suffer from disfiguring skin diseases, which good feeding alone will often cure.

A mistaken impression is also very widely diffused as to the effects upon the organism of *cane sugar* in large quantities. Sugar—although not entering into the composition of the tissues—appears to play an important part in the production of fat and the development of animal heat. But the varieties of sugar which are thus employed are those only of which glucose is the type. These undergo little or no change in digestion and are probably for the most part directly absorbed by the mucous membrane of the stomach. Cane sugar, on the contrary, behaves as a foreign body in the system until it has been converted into glucose—which conversion is principally effected, not by gastric but by intestinal digestion—the juices of the stomach acting upon this substance very slowly. It is plain, therefore, that the digestion of cane sugar must be a comparatively heavy task for the organs involved, and we are convinced that this article when taken, as it so commonly is, in large amounts, and at all times indiscriminately, is a source of no inconsiderable injury. The substitution, now almost universal, of glucose for cane sugar in the manufacture of candy, should, in our opinion, be regarded as a benefit.

Again, the albuminoids, gelatine and chondrine, are inferior to albumen as food, and their ingestion is followed by an increase of urea in the urine. "Calves'-foot jelly," and similar articles, as food for convalescents, are, consequently, hardly worth the trouble of preparation.

Recurring, now, to the positive aspects of our subject—experience proves that a mixed diet is the best to maintain the body in health. While too much nitrogenous food leads to an excessive amount of urea and uric acid, it is a well-known fact that animal life cannot be long preserved on an exclusive diet of fat and starches. A large amount of muscular work, can, it is true, be performed on such a diet, but a certain proportion of nitrogenous food is required to renew the tissues which become wasted and worn during the processes of life. It appears that a man on ordinary diet and doing an ordinary amount of work requires 300 grains of nitrogen and 4,800 grains of carbon. Two pounds of bread and three-quarters of a pound of meat will fulfill these conditions, though they will better do so if from one to two ounces of butter be added. Along with these representative articles, or in their stead, an immense number of other nutritive substances, in an almost endless variety of combinations, are employed by civilized humanity. In our next article we shall endeavor to show what is the actual relative value of some of the more familiar among them.

DEWBERRY ROOT IN DIARRHŒA AND DYSENTERY.—Dr. John S. Lynch, in the *Transactions of the Medical and Chirurgical Faculty of Maryland*, 1883, has an interesting article relating to the astringent influence of *rubus procumbens*, or dewberry root, from which we take the following:

Two years ago I was attending a patient in the last stage of phthisis, who threatened to be suddenly cut off by an intractable diarrhœa. After exhausting all well-known astringents, and giving the largest doses of opium I dared to give, I at last thought of the old domestic remedy I had seen used when a boy with such success on my father's plantation, and afterwards in the South during the war between the States. A teaspoonful of the fluid extract of dewberry root was administered every second hour with the effect of arresting the diarrhœa promptly and completely. Since then I have used this fluid extract habitually in all cases of obstinate diarrhœa and dysentery, both in adults and infants, and it has never failed me in a single instance. In the summer diarrhœa of infants I regard it as a perfect specific, and I am glad to say that I have not lost a single infant from summer complaint during the two years I have used it.

THE SO-CALLED RADICAL CURE OF HERNIA.

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ITS METHODS AND THEIR VALUE.

BY radical cure is understood the permanent and entire obliteration of the affection to which it relates. Investigation of the plans proposed for curing hernia soon reveal the fact that the exterior protrusion only is contemplated by the curative processes, and not its causative and producing factors. Any one who has given due attention to the principles which I have presented in THE TIMES will arrive at the conclusion that, not having an adequate foundation, all proposals to remove completely and permanently the local manifestation by local remedies must fail in practice, however plausible such proposals may appear. It is more reasonable to question the validity of the testimonials relating to such cures than the principles of mechanico-physiology whose reign is universal.

As, however, radically curative effects are claimed as flowing from a variety of purely topical methods, and as these claims are very captivating, by which numbers are liable to be led to disappointment, it is due that the reasonable inquiries of sufferers relative thereto should be answered.

The end contemplated is proposed to be reached by rendering the hernial canal in some way impervious to the portion of intestine or omentum presenting at its inner opening. Were this feasible, the effect would be that of superseding the truss and its pad by causing a substitute therefor in the tissues themselves; an obstruction equivalent to that of the pad in preventing protrusion.

It is proposed to gain this end by taking advantage of a well known law of the vital economy. This relates to nature's method of repairing injuries, such as mechanical accidents. Whenever healthy vital structure receives a wound, as a cut, puncture, or rupture, there immediately follows an abundant effusion from the contiguous blood-vessels of a reparative material, called coagulable lymph, into the surrounding parts. The solidification of this material appears to be designed to mechanically cement the severed parts, preliminary to the more vital and permanent reparation which follows; and also so to restrict the circulation, especially of the inter-vascular fluids, as to prevent diffusion of infected matter from such wound to the general circulation. Thus nature intends at once to prevent displacement of severed parts, till they can grow together, and to prevent injury to the general system arising from local, septic or other infection.

The so-called radical cure is nothing more than the superinduction of this reparative process by inflicting a local injury in the walls of the hernial canal. The necessary preliminary is to cause such injury of the hernial tissues as to superinduce local inflammation or something akin to that process, to secure the local effusion of plastic lymph destined to cement the hernial opening. It is the agglutination of the canal and the surrounding tissues with an effused solidifiable exudation which constitutes the essential part of this radical method of remedying hernia.

There are several ways proposed and practised, aiming at the one effect, each of which is known by its inventor, each having its advocates and reported successes. Some of the most prominent and specious of these will be here enumerated, to show the limitations and defects which, in the nature of things, must be common to all of this class of remedial processes; and also that the shortcomings always developed exist in the principles rather than in imperfection of the details of the methods.

The Method by Means of the Truss.—Several of the advertising truss manufacturers insist in their circulars that the special form of instrument they represent, will cause agglutination of tissues and the formation of a permanent obstacle to protrusion. As this announcement finds easy credence on the part of the sufferer, already prepared by the torture of successive trusses, and still under the stimulus of strong desire for emancipation from instruments, it may be pardoned human nature not fortified by the facts of general experience, if the radical proposal proves a captivating bait to purchasers. The difficulties inherent in the method, and previously pointed out, are either ignored, or the mode of removal left ambiguous, to be precisely determined by still further experience. And as the essential element of *time*, in which the proposed effect shall be secured, is always wisely omitted, it is clear that no complaint for nonfulfilment of promises can be brought. The happy consummation is always in the hopeful future. A subterfuge may be intended on the part of some of these pretenders to impossibilities; while the appearance of unmitigated venality is softened by the spontaneous cures which sometimes occur, brought about by undesigned and unnoticed improvement of conditions, working without credit and in spite of the instrument.

The medical journals contain from time to time accounts of new inventions, instruments and processes designed to compass the end implied by the name of radical cure of hernia. To show the similarity of scope and purpose contemplated by these, descriptions of a few are here given.

Dr. John Wood's Operation.—This consists in the closure of the abdominal hernial rings with sutures. Adhesion is expected to follow, producing occlusion of the canal.

Joubert's Method.—Inflammation is produced by the subcutaneous injection of a few drops of the solution of iodine, cautiously repeated at intervals, as the judgment dictates.

Wutzer's Method.—The scrotum is thrust up into the inguinal canal, a wooden concave case is applied, stitches are taken through the tissues, and the whole compressed by the application of screws, so as to cause adhesion of the inthrust parts to the borders of the hernial ring.

Heaton's Method.—The injection into the hernial canal of a solution of tannin and a little morphine and repeated.

Galvano-Cautery Method.—Needles plunged into the borders of the hernial tissues, and heated by a strong galvanic current. Superior effects are claimed for this method from the well known tendency of burns to be followed by contracted cicatrices. The connective tissue disorganized by heat seems to be less capable of perfect reproduction.

Dr. J. C. Hutchinson gives an account of cases in which the sac was surrounded with a ligature and the whole was cut off, followed by healing and obliteration.

The above will serve as examples of many others found in current medical literature, and in works of surgery; all, however, treating the affection as simply local, and ignoring any other or ultimate source.

The benefit promised by recourse to any of these methods is not immediate and positive, but remote and conditional. It is subject to the following drawbacks:

The patient must be kept in bed for several weeks, or rather for an indefinite period, and is finally allowed to assume the perpendicular position with the utmost caution. This shows that, at best, it is only the effect that is attempted to be remedied, and that the most ardent of radical operators do not consider the precedent conditions of the affection as in the least abated. When the patient is finally allowed to go about it is always insisted that he must wear a truss for an indefinite period.

The local inflammation, superinduced in the hope of benefit by either means described, is subject not merely to practical difficulties, but to dangers. The foremost of these is the possibility that the inflammation succeeding the operation may become uncontrollable, and carry destruction in place of healing in its course. The inflammatory action may assume a morbid type, as the erysipelatous or septicæmic form; it may extend beyond the intended limits and invade the peritonæum with which the hernial canal is continuous; a consequence which no judicious surgeon invites except under the direst necessity, which is not presented in this class of cases. In these days of knowledge of sepsis, he is not a good surgeon who wantonly exposes his patient to such perils.

The conclusions arrived at by the experience of surgeons of eminence is entitled to weight.

Says Druitt, of spontaneous cure: "The herniary aperture may become entirely closed and the neck of the sac obliterated, the cure may occur *in two or three years.*"

Again: "As to attempts at radical cure by cutting, causing slough by burning or otherwise, the less said about them the better."

Says Minor: "Radical cures fail, not from faults of the operation, but because the adhesions are not firm enough to sustain the pressure from above, and that of the truss-pad from below."

Dr. Frank Hammond: "The operation is ingenious, but will meet the fate of all operations which have been tried and condemned. It depends for success on those temporary *products of inflammation which constantly disappear* on the restoration of the tissues to a healthy condition."

Dr. Haywood: "No surgical operation known can be relied on to produce a radical cure of reducible hernia."

Faile Clark: "Any operation for radical cure is an unjustifiable one."

"The history of these (cases of radical cures) usually extends no further than the operation itself, and not to its permanent consequences. Radically cured cases are now wearing trusses while parading before the public as cured cases."

It hence appears that even when the perils incident to local operations for radical cure with the subsequent probation of "in bed" and truss wearing are happily passed, the probability of any advantages from them are exceedingly meagre. The most fortunate result is not health nor even a tolerable substitute for health of the parts; for nothing really vital or permanently mechanical can be thereby gained. The effused material is not a product of health, or a consequence of development. It is nature's temporary recourse, and its effects do not extend beyond the occasion which call it forth. Such effusions, of whatever consistency, are certain to be removed soon after the return of the advantages of natural, wholesome, bodily activity.

This result is only in accordance with general laws, reigning throughout the organism. The swelling of an acute abscess, which is composed of similar material, soon disappears. The provisional callus which occurs after fracture, after serving its temporary local purpose of fixing the contact and restraining the mobility of the parts, is also removed, leaving not a trace behind. There is no known method of preventing the absorption of supererogatory material in the healthy condition of the organism.

The remedial methods which, following their ad-

vocates, are here designated as radical, whether the means be the truss, or the wound-producing operation, are essentially the same, because in either case the effects immediately superinduced are essentially alike; and because the same radical fault attends them all. This is the failure to recognize or provide for any defect beyond the seat of the manifestation. The essential factor, without which the hernia is impossible—the mechanico-physiological one, is equally ignored in every so-called radical method. The inference is plain that the advocates of radical operations do not regard the return of health to the general system as being necessarily connected with the local cure, and bestow upon it scarcely any attention. This is manifestly a reversal of the order demanded by correct therapeutics.

Isolated tests or *provings* of the radical methods in any of the varieties above mentioned are, in the nature of things, impossible, and therefore reports of successes are valueless as evidence. This is because the patient is, at the time of the experiment with the radical method, subject to the powerful influence of the natural order of physiological events, to which all, the hernied and the unhernied, are alike exposed. It follows that reported cures are more probably the effects of the usual dominance of physiological activities. These are more powerful and far-reaching in their nature and scope than the interposed curative process. This probability is transformed to certainty by the development of the mechanico-physiological idea; since it is shown that nothing more than a judicious cultivation of the powers inherent in the system, whose defect is made manifest by hernia, is required to cure hernia. Hernial affections exist potentially, anterior to the period, as well as interior to the point of manifestation. They are then in an embryo, or developing stage, surely presaging the subsequent, advanced stage of development, when they become obvious to the senses. The advanced stage is but a superaddition to preceding inferior stages, and *not* a new thing of another sort.

The utility of instruments or operations in this concealed stage of the same thing is inconceivable. No question has yet arisen involving exterior mechanism. There is nothing to beguile the judgment. Yet it will be readily admitted that this early stage is a proper one for medical advice and benefit; and that such benefit must arise solely from the correction of the causes of the progressing morbid development. The defects in mechanico-physiological activities demand improved conditions for perfecting them. The morbid products in even the mechanical phase, are removed coincidently with the correction of morbid processes; which, in their last analysis, are but an inferior degree of the physiological processes due.

The mistake in the conception of hernia, fatal to the efficacy of all topical remedies, is essentially this. It is regarded as local, isolated and mechanical. This conception is inadequate; including, as we have seen, only a portion of the facts, and these the subordinate; while the causative and potential facts are neglected. The defects of etiology are represented in therapeutics.

The contents of the female pelvis unfortunately furnish a similar field for futile and injurious experimentation, in the hope of securing radical cure for affections pertaining to its organs. These affections so far as relates to mal-position, and the consequences imputed to that cause, are entirely analogous to hernial protrusion. It is therefore perfectly natural that those who regard hernia as an entirely local affection, neglecting its causative factors, should place the same pathological estimate upon the more obscure affections of the female pelvis, and endeavor to effect their radical cure by similar means. The body girdle, the pessary and the combination of the two, are but modifications of the truss, adapted to comply with the same supposed requirements, the point of application only being somewhat removed from the seat of external hernia. The similarity and the differences of these two classes of affections are well denoted by the contrasting terms *intrusion*, when the manifestion relates to the contents of the pelvis, and *extrusion*, when it is external, visible and palpable. The location, mode and form of manifestation are subordinate, and do not materially affect the principles on which these manifestions occur, their essential nature, or the principles of effecting restoration. The ostensible use of instruments is to raise the uterus to its natural position, and to retain it there till the natural supports shall acquire the strength necessary to dispense with the substituted support. Depression, or as it is popularly called, prolapsus, and its consequences are thus theoretically cured.

The reader already knows that the pelvic contents are not naturally supported by obstacles being thrust beneath them. This is even more opposed to natural indications than is the truss pad for hernia, since in the latter instance there is an opposing abdominal wall; while in the former, the vaginal outlet affords no comparable obstacle. The latter fact indicates that underlying support is uncalled for, and that devices for that purpose contribute nothing to natural support. It may here be repeated that the actual support of the pelvic contents, like that of the abdominal, consists mainly in organic rhythm.

The disadvantages of the pessary are even greater than those of the truss pad. The former is thrust among parts naturally in juxtaposition. Its pressure superinduces absorption of the muscles and connective

tissue to as much greater degree as the surfaces under pressure are more extensive. It collects secretions and detains them till decomposition occurs. It has no certain resting place and is always liable to obstruct the natural passages.

The futility of the attempts to effect the radical cure of hernia by operations, surgical or other, confined to the seat of the manifestation, is paralleled by equally or even more futile endeavors to cure the pelvic outcome of the same causes. This outcome being diversified by many subordinate causes and divided in unequal degrees among several distinct parts, serves to render its real nature and source obscure, and therefore favors the endeavor to remove these effects by local means. The multiform appearances presented suggest a diversity of local remedies, often applied in succession. The whole taken together, is a counterpart of the topical radical measures for hernia. The therapeutics is conceived under the same mistake as to the potential factor. The remedies are irrelevant to the requirements of controlling cause, and cannot effect its abatement; at the most, only its modification. And whatever good effects appear to follow the topical remedy are, of necessity, attributable to other than the natural causes.

In the light afforded by mechanico-physiology, as presented in my work on "Hernia," the radical cure of affections of the pelvic contents having their source in mechanical displacement, in hyperæmia, or both, may be sought in vain through so-called local support or topical appliances, for the same reasons that these methods are confessedly and demonstrably inadequate in hernial affections.

THE PHENIC-ACETIC ACID AND POTASH TEST.*

By Henry B. Millard, A.M., M.D., New York.

This reagent, which has given me great satisfaction, was suggested to me by Méhu's reagent of phenic and acetic acid and alcohol for ascertaining the percentage of albumen. The objection to Méhu's formula is that, while a delicate test for albumen, this disappears upon applying heat, which makes it impossible to distinguish it from the proteids and alkaloids.

My formula is as follows:

℞. Acid. phenic. glacial. (ninety-five per cent.), ʒ ij.
Acid. acet. puri .. .. ʒ vij.
M. Add liquor potassæ..... .... ℥ ij. ʒ vj.

It is important that glacial, that is, chemically pure, acetic and phenic acid should be used, both for the accuracy of the test and the perfect clearness of the solution. The proportion of liquor potassæ I have indicated is not arbitrary, but has been the result of careful experiment, so that the mixture would be neither too acid nor too alkaline, otherwise, as is well known, a soluble acid or alkali-albumen would be formed. The advantages of this test are, that although it gives a precipitate with strong solutions of quinine and strychnine and the peptones, this disappears readily upon the application of heat and with alcohol; the cloudiness produced by the gum resins and copaiba disappears by alcohol. Though less liable to do so than Tanret's test, it may, like it, produce a very slight reaction in the urine of cystitis, even after filtration. The same means of recognizing the cause of the reaction may be resorted to that are recommended when Tanret's test is used.

Another possible source of error, easy, however, of avoidance, is that an excessively acid urine might form with the acids of the test an acid-albumen, disappearing on the application of heat; or in very alkaline urine an alkali-albumen might be formed; in the first of these cases a little more potash, and in the second a few more drops of acetic acid might be added, when the precipitate would reappear, the cloud, however, produced by protein bodies would not reappear. The necessity of adding either of the above reagents is, however, exceedingly rare. I find that with Merck's albumen this test shows distinctly one part in 200,000, and faintly one part in 250.000. With albuminous urine it shows one part in 300,000, showing, like Tanret's test, a smaller proportion than in Merck's albumen. It produces with one part in 150,000, and above that, a light blue tint. Its reaction in one part in 300,000 is, however, clearer than by Tanret's test. I need hardly say that when albumen exists in such minute quantities the urine should be clarified, and great precautions should be taken, the urine being allowed to trickle slowly down upon the reagent. In such cases a zone is not formed, but a greenish tinge with Tanret's, and a blue with my own test, is produced; with this last, if there be much albumen, a whitish turbidity ensues, or a thick whitish layer.

Method of procedure.—The albuminous urine I employed in the above computations was that of a patient suffering from chronic interstitial nephritis of a mild type; the specific gravity was 1.022, normally acid; there was no cystitis, and it was, except being albuminous, about normal in every way. It contained, by Roberts' method of estimation, one-fifth of one per cent. of albumen, or one part in 500.

With this figure to start from, I made dilutions with distilled water of one part in 10,000, 100,000, etc. I made a ten per cent. solution of Merck's albumen in distilled water, and the other dilutions from that. In testing for minute quantities, one

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part to 100,000, and above that, with each of the above tests, I placed side by side with the albuminous solution and urine, distilled water and non-albuminous urine treated the same way for comparison. Even distilled water with nitric acid and my own test will show a faint bluish zone at the point of contact, and it is necessary to be able to recognize the difference.

My experiments with all the substances I have used, and various reagents I have not here referred to, have numbered many thousands. My

Conclusions, as the result of these experiments, are: That nitric acid shows one part of albumen in 100,000. Heat shows one part in 100,000, but rather more clearly than nitric acid, and in examinations of urine I often find it to show minute quantities of albumen where nitric acid does not. Tanret's test and my own test will show one part in 300,000; the latter test the more clearly; this precipitates fewer of the alkaloids than Tanret's.

Nitric acid and heat show almost exactly the same reaction and percentage with artificial albumen and albuminous urine. Tanret's test and my own show the reaction better in the urine than in the artificial preparation. I think, for practical purposes and ordinary clinical use, we may show with ease, by nitric acid, one part in 100,000; heat, one part in 100,000; Tanret's test, one part in 200,000; the phenic-acetic acid and potash test, one part in 200,000; heat showing it more clearly than nitric acid, consequently being more sensitive, and my own test showing it more clearly than Tanret's.

Heat, although somewhat more sensitive than nitric acid, is often quite unreliable from the turbidity produced by it with mucin, and this particularly after acetic acid has been added.

Finally, there are cases in which no single reagent is sufficient, and in which, in order to determine the presence of albumen, the employment of several is indispensable.

ALCOHOLIC PARALYSIS.—(Clinic of Prof. Charcot—reported by Gille de la Tourette, Interne.) Women are more liable to the disease than men. It begins almost always with acute pains in the lower limbs, and especially at night. The pains soon pass to the upper limbs. Analgesia is developed. Motor paralysis appears, involving all the limbs, and especially the extensor muscles. At the same time there are vaso-motor disturbances, œdema around the malleoli, redness of the skin, sweating of the hands and feet, etc. The electrical excitability of the muscles is much diminished; the mind becomes affected and there is loss of memory. The disease becomes chronic and is rarely cured even with total abstinence from alcohol. The diagnosis is sometimes difficult, and during the stage of acute pains it may be mistaken for locomotor ataxia or diabetes. Finally, it must not be mistaken for saturnismus. The treatment is hygienic and therapeutic and the absolute disuse of alcohol.—*Revue de Clinique Médico-Chirurgicale*, November, 1884.

CLINIQUE.

OBSTETRIC HINTS.

BY J. SAVAGE DELAVAN, M. D. (A. M. C., 1861)
ALBANY, N. Y.

THIRD ARTICLE.

THE FORCEPS AND THEIR USE.

IN former papers it has been the endeavor of the writer to furnish practical hints for the guidance of the young practitioner, and following the same plan it will be his purpose in this article to give clear and practical direction for the use of the obstetric forceps, that may be of use to him when yet inexperienced in the practice of midwifery.

The first case of instrumental labor that the physician has, unaided, successfully accomplished, is an era in his life. The learned works he has perused, the terrible tales he has heard of lacerations of the uterus, of fatal injury to the mother, and of the mutilation of her helpless infant by these engines of destruction; the careful directions found in obstetric literature for their introduction and use, with numerous cautions against injuring the maternal organs, and lastly, the fact that the case before him positively requires the aid of these fearful yet necessary appliances; all these points have their influence over his mind.

As these hints are written for the *beginner* and not for the *expert*, we say, firstly, that while ignorance is always dangerous and inexcusable, while no one should presume to enter the chamber of the parturient female as a physician unless he thoroughly understands the anatomy of the pelvis, the diameters of its basin, the size of the fœtal head, and its relations to the parts, still, the well informed tyro who knows theoretically what he has to do, need have no more fear in using these wonderful inventions for the safe and easy relief of pain, than he would have in passing his hand into the vagina to remove the extruded placenta. The forceps, rightly used with proper care and with no undue haste or harshness, are one of the most important adjuncts to the obstetric art, and the old-fashioned dread and horror of *instruments* is fast passing away.

As is well known, the forceps are instruments, variously formed, the use of which is to grasp some portion of the fœtus, usually the head, and by careful manipulation and traction, aid the operator in the delivery of the child, when nature unaided is either unable to perform her task, or when the pain and protraction of confinement can be safely lessened by their use.

The varieties of forceps are legion; almost every obstetrician of eminence has felt it incumbent upon him to invent some new form, either in length of blade or form of handle, or to make some little change from the last invention. For the purposes of this paper it will be only necessary to state, that forceps are of two kinds—the long and the short—the former to be used when it is necessary to apply them in the superior, the latter in the inferior strait. One pair of long forceps will be all that is really required, although it is advised to have a pair of each.

It matters very little what forceps we choose—every practitioner has his preference. My own is for the Elliot long, and the Sawyer short, although the forceps of Dr. Comstock, of St. Louis, are most excellent. Many new inventions in forceps are constantly appearing. Tarnier, and Lusk's modification of them, are very useful in particular cases, but they can hardly be advised for the young obstetrician who desires one, or at the most, two instruments.

Your forceps have been selected—they are ready to your hand—you are confronted with a case that calls for their use—when should they be applied, and how?

The general rules for instrumental interference are variously laid down in works on obstetrics; but for our purpose we may reduce them to three:

First. When from the size of the fœtal head and the contracted state of the pelvis, nature alone could not accomplish delivery.

Second. When from the enfeebled state or condition of the mother, from *any cause*, prompt and rapid delivery is necessary.

Third. When we can safely shorten the duration of labor, and mitigate its pains.

These are the three general rules I would advocate; the application of them must be learned by experience, and at the bedside of the patient.

The forceps are almost invariably applied to the head, and most frequently after its passage through the os uteri, constituting what is called the low operation, and in this condition of affairs, when we find that the pains are becoming less frequent, the patient exhausted, and the labor making no progress, we should no longer hesitate, but at once proceed to apply the forceps, and in the following manner: Place the woman in a comfortable position for herself and as convenient for the operator as possible. Generally she should be crosswise of the bed, the knees drawn up and flexed, the heels resting on the side board, her head and shoulders supported by the nurse. First warm the instruments by plunging them in hot water, wipe them dry, and anoint the blades with vaseline; then insert two fingers of the right hand into the vagina as a guide; with the left grasp the lower blade and pass it gently, and the only direction I would give is, hold it easily and use no force, being careful only to have the concave surface on the left side of the head. It cannot go wrong—there is only one place for it to go—and if no force is used and it is inserted during the absence of a pain, it will certainly find its way where it belongs. The canal is bathed in mucus, the head is smooth and globular, the blade warm and oily, and it would be an impossibility, unless brute force is used, to insert it any way but the right way. When the first blade is properly applied, drop the handle; no assistant is needed, it will stay where you have placed it, unless a pain occurs, when we should gently support the handle until it passes. Now reversing the hands, insert the upper blade in the same manner, only being careful that it is placed on the right side of the head. Both blades being introduced, take the handles in your hands and by gentle manipulation they will lock: if they do not, withdraw them slightly and try again, using no force; take *time*, and stop on the occurrence of a pain.

Your forceps are now locked. It will be proper to bring the handles together, to ascertain how much pressure to use. The screw in the handle of the Elliot and other forceps of like pattern is useful to regulate the pressure, and the bringing together of the handles will also inform you if any portion of the maternal tissues is caught by the blades.

Your forceps are now introduced; it is simple enough, and it is strange that so much has been written about so slight an operation, for any physician in ordinary cases, like the one I have described, with ordinary delicacy of touch, ought to find no difficulty in this procedure.

Now with your left hand grasping the lower portion of the instruments just at the junction of the blades, the palm upwards, the index on the fœtal head, the right hand firmly grasping the handles palm downwards, you are ready for action. Wait for a pain and then draw steadily in the direction of the curve of the pelvis, not too strongly at first, and ceasing when the pain passes. You want to assist, not overcome nature. The older accoucheurs advised that the force exerted should be two-thirds lateral and one-third tractive; but we believe this to be bad practice, as it may bruise the soft parts of the mother, and does no good. As with each successive pain the head advances little by little and finally presses on the perineum, care must be taken to avoid laceration; the left index finger being the guide for the advancing head. As it emerges from the vulva the forceps should be gradually elevated until the handles lie almost on the abdomen of the mother, then carefully unlock and withdraw the instruments and let nature complete the delivery. This is the method of using instruments in the so-called low operation, and when the head is not too large, the

Sawyer forceps are the best I have used. They are light, easy of introduction, and by the curve of blade and handle act almost automatically. To recapitulate:

Use deliberation, no undue force, and observe great care when the head presses on the perineum.

BRONCHITIS ACUTA—ACUTE BRONCHIAL CATARRH —COUGH.

BY F. G. OEHME, M.D., TOMPKINSVILLE, STATEN ISLAND, N. Y.

(*Continued from page* 13.)

39. *Allium cepa* is a more useful remedy in coryza and coughs than most physicians suspect. Its cough, brought on by inhaling cold air, is similar to phos., and it will prove often curative when the latter fails.

40. *Ambra gris.*—Dry cough in paroxysm, similar to whooping cough. Barking, spasmodic cough, worse from talking and at night, with retching after eating; frequent eructations. Continued hacking of hysteric persons, with tickling, when ignat. failed.

41. *Ammon. brom.*—Dry, spasmodic, exhausting cough, with great irritability of the whole nervous system.

42. *Ammon. carbon.*—Dry cough, from tickling in the throat, with hoarseness. In the windpipe and under the sternum sensation as if from dry heat.

43. *Ammon. mur.*—Mostly in chronic catarrh, especially of old people, with expectoration of much thick, whitish phlegm. When the cough sounds looser than what it is. Rattling of phlegm, especially in lying, with shortness of breath when moving or in lying. Bronchiectasia, emphysema. Coryza with frequent sneezing, profuse watery discharge, hoarseness and burning in the larynx.

44. *Amylum nitr.*—Violent, incessant, spasmodic cough from irritation, so that the patient cannot catch his breath, and there is danger from rupturing a blood vessel. It *produces* very violent attacks of spasmodic cough, even with retching.

45. *Aral. racem.*—Cough after going to bed, with labored breathing. Violent cough after a short first sleep at night, before midnight.

46. *Atropin.*—On account of a great irritability, every change in the temperature, speaking, deep inspiration, etc., produce the most violent fits of an explosive cough. When bellad. is ineffectual.

47. *Borax.*—Cough with *musty* tasting and smelling expectoration and musty-smelling breath. Cough with white, frothy expectoration in the morning. Stitching pain in the upper part of the lungs.

48. *Capsicum.*—Dry cough, worse in the evening and at night, with splitting headache, retching, and pains here and there.

49.—*Carbolic acid, phenic acid.*—Inhalations of carbolic acid will frequently remove an obstinate irritation to cough. Its vapor diminishes the frequency of bronchial catarrh.

50. *Carduus mar.*—Dry cough, worse nights, with little expectoration in the morning, from enlargement of the liver and spleen, with pain or soreness of these organs.

51. *Chelidon maj.*—Spasmodic cough with dyspnœa and constriction in the throat, suffocation.

52. *Chloral hydr.*—Obstinate cough nights, preventing sleep, with dyspnœa. Chloral 1 dil.

53. *Coccus cacti.*—Cough, worse when waking at six o'clock A. M.; clear, dry and barking; slight expectoration of thick, viscid mucus. Worse an hour after dinner, three o'clock P. M.; so violent as to cause vomiting and expectoration of a great quantity of thick, viscous and albuminous mucus.

54. *Dolichos prur.*—Cough worse at the time of going to bed or soon after. (Aral.)

55. *Emetin.*—Like ipecac., but more effectual.

56. *Euphras.*—Cough with coryza and inflammation of the eyes, worse in the morning. If ineffectual, eugenia jambos.

57. *Ferrum carbon.*—Spasmodic cough after a meal with vomiting of food. Cough of chlorotic, tuberculous persons. Cough with bloody expectoration, increased by rest, especially in bed, even driving out of bed, better after moderate motion (rhus).

58. *Ferrum phos.*—Cough worse nights, in the morning after rising and after a meal, with expectoration and vomiting of much white phlegm; can keep down only bread and milk, no hearty food; stomach feels weak. Cold sweat when working.

59. *Ferrum iodat.*—Short, crowing cough, with white or yellowish, rather thick expectoration and pain in the lungs.

60. *Gelsem. semperv.*—In the first stage of bronchial catarrh with or without coryza. Liability to bronchitis. Rawness and hoarseness; soreness of the throat. Aphonia. Constant, dry, painful cough. Tickling in the throat and trachea. Spasm of the glottis. Constriction in the lower part of the chest. Influenza.

61. *Kali iodat.*—Suffocating, painful cough, dry or loose, purulent expectoration mixed with saliva and blood, of fetid smell and saltish taste; titillation and burning, gnawing pain in the larynx; hoarseness, aphony, pain, soreness in the chest. Coryza.

62. *Lachesis.*—Cough from tickling under the sternum or in the throat pit. Some rattling, but not much or no expectoration. The patient cannot bear any clothing on the neck and pressure there causes cough. Cough at night with soreness of the chest and bloody expectoration. Cough as if something had got into the throat with retching and vomiting.

Worse after eating, *after sleeping*, after rising from a lying position. Pain in the throat.

63. *Lactuca virosa.*—Spasmodic, dry, hollow, crowing, suffocating cough with a feeling of constriction in the chest, as if it should burst. Tickling in the throat. The patient can scarcely catch his breath during the paroxysm. *Desire to take deep inspirations.* Asthma.

64. *Laurocerasus.*—Continued irritation and tickling, hacking, shortness of breath. Continued coughing when lying down nights. Titillating cough from disease of the heart. Dyspnœa.

65. *Ledum.*—At every cough musty taste in the mouth, causing nausea and vomiting. Expectoration itself without taste or smell. Normal taste when not coughing.

66. *Lycopodium.*—Hard, dry, spasmodic cough, also hollow cough with much thick, gray, green, yellow expectoration, rattling, shortness of breath. Worse nights, but especially in the morning after awaking or from four to eight o'clock P. M.; increased by lying, motion or exertion. Children or old people. Emaciation, sometimes ravenous appetite.

67. *Mangan. acet.*—Dry cough, better while lying. Hæmoptysis with stinging in the right lung. Mostly dry cough. Huskiness.

68. *Natr. muriat.*—Cough worse in the morning and on retiring, with irritation in the epigastrium. Retching and vomiting. Tired feeling in the hypochondrium.

69. *Nitri acidum.*—Cough with stinging in throat and chest, scraping, tickling, burning. Soreness and sensation of heat in throat or chest. Worse nights. Hoarseness. Expectoration of coagulated blood or yellowish or greenish phlegm. Especially with choleric, lean old persons. Ulceration. Tuberculosis. Heart disease.

70. *Peruv. balsam.*—Mostly chronic cough with expectoration of pus.

71. *Ruta grav.*—Catarrhal fever. Croaking cough, waking the patient twelve o'clock at night, seldom with a little expectoration, with retching and pain under the sternum.

72. *Sambucus nig.*—Violent suffocating cough, especially nights, with whistling breathing and bluish face. Cough, with saltish and sweetish, purulent, hectic expectoration.

73. *Sanguinaria canad.*—Distressing, dry, spasmodic cough, especially with children, causing much pain in the chest, worse towards night, by lying down and cold air. Tickling in the throat. Rawness and burning in the bronchi.

74. *Scilla marit.*—Abundant secretion of tough, white mucus, very difficult to raise.

75. *Tussilago.*—Painful, shaking cough, worse from talking, with tickling in the throat. Thin expectoration.

76. *Verbascum thaps.*—Dry, hoarse, hollow, barking cough, similar to croup, in the evening or nights, especially with young children. It is not croup, nor does it turn into it, neither is it cured by spong. or iodium.

END.

CASE OF SUPPURATIVE PLEURITIS.

By Edward Jay Morgan, Sr., M.D., Ithaca, N. Y.

On the 13th of December last, I was called to see Miss H——, aged 14, who, after a chill, was attacked with cough, dyspnœa and high fever. Upon examination I found her suffering with lobular pneumonia (double); pulse 130; temperature 105°; mind wandering. I prescribed the ordinary remedies and my patient continued in a doubtful condition up to the 23d inst. On the 24th copious, characteristic expectoration commenced, and on the 29th the dullness began to disappear with partial return of respiratory murmur. The dyspnœa gradually diminished, and on the fifth of January I found pulse 90, temperature 102°, head clear. On the 10th inst., from exposure, she contracted a cold, which was followed by another chill and great pain in the region of the left lung. The following evening all the symptoms of pleurisy became well marked, with rapid effusion in the pleural sac. The heart was pushed to the right side, so that the apex beat was three inches from its normal position. She was unable to assume the horizontal position; respiration labored and rapid; pulse 130; temperature 105½°. On the 16th of January I decided upon paracentesis thoracis.

Assisted by Dr. Lewis and Dr. E. J. Morgan, Jr., I punctured the chest between the eighth and ninth rib, a little back of the axillary line, and drew off, by means of the aspirator, twenty-four ounces of serum, which relieved the patient greatly, and she passed a comfortable night. Thirty-six hours after, I was surprised to find the dullness rapidly rising. The following day I placed the needle in the same opening and (with difficulty, on account of the character of the fluid) drew off twelve ounces of pus. This again gave relief. January 19, pulse 100, temperature 102°. On the 22d I found the sac rapidly refilling, with rising temperature and increasing debility. On the day following I passed an ordinary-sized trocar into the sac, and when I withdrew it, leaving the canula, a stream of offensive pus ran a foot from the opening, filling the canula until I drew off two quarts. I washed out the sac with a one-per-cent. solution of carbolic acid twice daily for twelve days, after having *thoroughly* evacuated the pus. From that time my patient began to show signs of decided improvement;

on the 8th of February, pulse 80, temperature 99°, appetite good, bowels regular, and patient able to stand erect; the heart had fallen back nearly to its normal position, and the lung began to expand. February 12, I withdrew the drainage-tube and closed the wound. On the 15th inst. I dismissed my patient; pulse and temperature normal. During the treatment I withdrew in all (by actual measure) *twenty-four* ounces of serum and *six gallons* of pus. I made no effort to exclude air from the chest and no evil resulted therefrom.

SOME INDICATIONS FOR THE USE OF MEDICATED TABLETS.

TABLET triturates and saturates have come into such general use with the profession—owing largely to the convenience of their form, and the accuracy with which they are prepared—that it becomes important to those who prescribe them to know the indications upon which they should be selected.

It will be our intention to take up each month such of the more important drugs as our space will allow, until we have gone through the list in alphabetical order.

This new form of dispensing potent remedies generally consists of the medicine which has been triturated with sugar of milk, until a thorough and complete division and equal distribution of it has been made throughout the mixture, then made into a soluble paste with varying proportions of alcohol and water, and afterwards moulded into tablets of exactly the same size and weight. Trituration, of course, is confined to those drugs which can be thus treated.

These tablets are held together by a small portion of the sugar of milk being first dissolved, and afterwards recrystallized into the moulded form, with enough adhesion to bind their particles together when dry, without interfering with their ready solubility when added to water or taken into the stomach.

The success which has attended the introduction of this method of dispensing medicine which is given in small quantities, is due:

First. To the care taken in selecting and manufacturing the drugs and chemicals entering into their composition.

Second. To the thoroughness of division of the remedy, and consequent perfect accuracy of dose.

Third. To the quickness and ease with which they are dissolved or diffused in water, or in the stomach.

Fourth. To their elegance, and novelty of form and appearance.

EXPLANATION OF TERMS.

1*x*, *First Decimal Trituration.*—This contains one part of the crude substance triturated for two hours with nine parts of pure sugar of milk. Each grain contains one-tenth grain of the crude material.

2*x*, *Second Decimal Trituration.*—This is prepared by triturating for two hours one ounce of the 1x with nine ounces of pure sugar of milk. Each grain contains one-hundredth grain of the crude substance.

3*x*, *Third Decimal Trituration.*—This is prepared by triturating in like manner one part of the 2x trituration with nine parts of pure sugar of milk. Each grain contains one-thousandth grain of the crude drug.

6*x*, *Sixth Decimal Trituration.*—This is made by triturating one part of the 3x trituration with nine parts of sugar of milk. Of this, one part is triturated with ninety-nine parts of sugar of milk. Each grain contains one-millionth of a grain of the crude substance.

Tablets are also made with mother tinctures, each containing from one-quarter minim to two minims of the medicament.

In order to use these preparations successfully, it must not be expected that the same effect can be produced by them as from a dose that approaches the maximum, for the variation of dose is all important in deciding the means to be employed, and to this end we submit the following indications, which will help to individualize the selection:

The alkaloid aconitia is prepared in tablets from the $\frac{1}{100}$ to the $\frac{6}{100}$ and the tincture of the aconitum napellus, made with equal parts of the expressed juice of the whole fresh plant and alcohol, from ¼ minim to 1 minim.

This remedy is indicated in the first stage of inflammatory conditions, especially when caused by exposure to sudden changes to cold temperature, when the pulse is full and rapid, the skin hot and dry, there is great restlessness, intense and incessant thirst, nervous excitability and anguish.

Actæa racemosa tablets are made from the tincture, and contain fro n ½ minim to 2 minims each.

Its special action is that of erethistic hyperæmia of the muscular system in general, characterized by soreness, numbness, cramping, stitching pains, sometimes like electric shocks.

The pains are aggravated by motion, like bryonia, but with actæa the belly of the muscle is more likely to be affected, while bryonia is most marked in its action upon the joints.

In the reflex symptoms of ovario-uterine complications, actæa will be found of the greatest service.

Aloes is made in trituration of the $\frac{1}{10}$ to $\frac{6}{10}$, and in tincture 1 minim. Its great field of usefulness is in portal and hemorrhoidal congestion, characterized by griping tenesmus, urging to stool, purging of the bowels, loss of control over sphincter, and extreme prostration.

The piles which aloes will cure are relieved by the application of cold water.

The New York Medical Times.

A MONTHLY JOURNAL

OF

MEDICINE, SURGERY, AND COLLATERAL SCIENCES.

EDITORS:

EGBERT GUERNSEY, M.D. ALFRED K. HILLS, M.D.

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"*A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and* OUGHT *to be the* ONLY ACKNOWLEDGED RIGHT *of an individual to the exercise and honors of his profession.*"—Code of Medical Ethics, Amer. Med. Ass., Art. iv., Sec. 1.

Our practice is *not* "based on an exclusive dogma, to the *rejection* of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology and organic chemistry."

COUNTY MEDICAL SOCIETIES.

It has been supposed that the law requiring every physician to register his diploma in the County Clerk's office abrogated the law of 1827 requiring practitioners of medicine to become members of a county society. This question has recently been submitted by the New York County Medical Society and the New York County Homœopathic Medical Society to eminent legal counsel, who report, after careful study of both laws, that the act of 1827 is still in force, and that membership of some county medical society can be exacted of every practitioner under penalty of forfeiture of the right to practice upon refusal. Until a physician ceases to practice his profession the opinion of these legal gentlemen is that he must belong to some county society.

The intent of the framers of the law requiring every physician to register his name and diploma in the County Clerk's office was, clearly, that it should take the place of the law of 1827, but, until the matter is settled by judicial decision or legislative enactment all who do not unite with some county society are liable to prosecution. The law, in the past, has been a dead letter, as there are nearly one thousand physicians in this city and Brooklyn who have not united with any county society, but as every good citizen tries to obey the law, we state the legal facts so that the profession may be moved either to comply with the requirements of the act or unite in having it removed from the statute books as useless lumber.

The Constitution of the New York County Homœopathic Medical Society states that membership can only be obtained by those who practice upon the principle of "*similia similibus curantur*," while the constitution and by-laws of the New York County Medical Society leave the question of practice entirely open, recognizing as regular all colleges so recognized by the State, opening its doors to the admission of graduates of homœopathic medical colleges just as freely as those of the old school, asking no questions of one or the other as to individual belief or mode of practice. In fact, the members of both schools act upon the principle of "go as you please," and at present no attempt is made to interfere with the individual opinions or mode of practice of the members. We presume there are not to-day two members of the New York County Homœopathic Medical Society who believe in the principles of similia as an exclusive law in therapeutics, and we are equally confident there are not two members of the New York County Medical Society who do not utilize to a greater or less extent the great homœopathic principle of therapeutics in their daily work. The little tablets and parvules in which drugs are thoroughly triturated with sugar of milk and given in minute doses, naturally lead to a more intelligent knowledge of the dual action of drugs and bridge over with a solid and enduring roadway the terrible chasm which has so long separated the two great schools as with an impassable gulf. The extent to which this innovation on the practice of the old school in giving medicine has been carried, is seen in the fact that one drug house finds it impossible to supply the growing demand for tablets, notwithstanding they are manufactured by the tens of thousands every day and are purchased and dispensed in large quantities by the most virulent of the old codists.

When we take into consideration the fact that this is simply the experience of one house, and that there are more than a dozen others in the trade turning out the tablets and parvules by the million, we can form some idea of the tremendous change which is taking place in old school practice. In the meantime, the law of 1827 is still in force, and though apparently a dead letter, can still be sprung upon practitioners, as laws and society regulations have been in times past, as a weapon in the hands of personal spite to gratify one of the worst elements in human character.

THE WATER SUPPLY.

The health organizations of many of our large cities, in view of the fact of the prevalence of the cholera in Europe during the past year and the great danger of its appearing on this side of the ocean during the coming summer, are very wisely turning their attention to a careful investigation of the water supply. There is no doubt that cholera germs, as well as those of other diseases, are communicated through impure water more than in any other way, and every city, town, hamlet and farm house will do well to closely scrutinize the purity of their wells, springs, and general water supply.

A few years ago, in a neighboring village, a whole family suffered from severe illness, for which it was impossible to account, except from some local cause. A quantity of salt was thrown into the cesspool on the adjoining property, and the water in the well which had supplied the drinking and cooking water of the sick family subjected to the spectroscope, showed the yellow band of chlorine, revealing the fact that the poison of the cesspool had filtered through the soil unchanged to the well, whose water it had poisoned. No doubt many cases of fatal sickness could be traced to similar sources.

The result of a recent investigation of the Board of Health, of this city, into the sanitary condition of the Croton water-shed, which furnishes us our supply of water, is not of the most encouraging character in view of the pestilence which may be at our doors during the summer. The Croton water-shed is traversed by numerous creeks which flow into the Croton river and covers a district of about 339 square miles. The population in villages and farm houses is 22,000, and their excreta, together with that of the domestic animals, must, of course, find its way, to a greater or less extent, into the running water courses. Large condensed milk factories and slaughter-houses are located on the banks of the river, and the contents of the privies for the use of the employés and the offal from the slaughter houses find their way directly into the running water. Probably a large portion of this poison is neutralized or destroyed before it reaches the pipes which supply our houses in the city with water, but is it not possible, nay, even probable, that there may be sufficient poison germs retained to be a source of trouble when atmospheric conditions are such as are usually found during the prevalence of cholera epidemics?

The water supply of New York is probably as free from impurities as that of most of the other large cities, but in times of epidemics drinking water coming from sources at all questionable should be boiled or distilled, or water used from springs known to be entirely free from the slightest taint of animal or vegetable matter.

With clean, dry cellars, pure water, and fresh vegetables and fruits, there is but little danger from cholera, either in city or country.

LUNG GYMNASTICS.

Probably most of our patients would be quite surprised if we were to tell them that very many healthy people do not habitually use all their lungs in the act of respiration. Yet this is undoubtedly the case, especially in regard to persons engaged in sedentary pursuits. Some of these individuals may be "too lazy to breathe"—though not entirely conscious of the fact. Perhaps it would be more correct to say that they are "too careless to breathe," or that they never comprehend the full importance of the function. Dr. J. H. Tyndall has well said: "The importance of knowing how to breathe cannot be overestimated. No line of treatment [of lung diseases] at home or by change of climate should be inaugurated without thorough instruction in lung gymnastics, in the mechanism of breathing. Until you have paid close attention to the subject for a number of years, you will never know how many human beings do not know how to breathe, and through which organ to breathe. Respiration, this most important of all functions of life, is by some carried on superficially, by others pervertedly and contrary to physiological requirements."

"Breathing is a function which should be exercised slowly and profoundly; a requirement which can only be fulfilled by breathing through the nose. Breathing through the mouth leads to superficial and often rapid breathing; still oftener to snapping off the air."

We are often called on to prescribe or give advice for patients of sedentary habits—as bookkeepers, clerks, students, and women in general—who complain of pain in the upper half of the chest, or at

least of a very uncomfortable feeling of oppression referred to that region. They are often afraid that consumption is threatening them, or that their lungs are already rendered partially useless by the disease. In such cases we may frequently notice a marked expression of languor, or some degree of melancholy, with sallowness of the skin. There is also, perhaps, soreness of breast or lungs, a little cough, dyspnœa on exercise, lassitude, speedy exhaustion, rapid pulse on slight exertion, constipation, mental dullness, etc.

The proper remedy, or at least a most valuable adjunct in all such cases, is *forced respiration*. Let the patient be instructed at once how to breathe so as to inflate his lungs to their utmost capacity, and let him practise these forced inspirations and expirations from four to six times every day, for ten or fifteen minutes at a time, and with proper attention to diet and regimen he will soon feel like a new man.

Tyndall says, "lung gymnastics proper should be carried on in the open air, while at work if possible, or while walking or standing still, or in a well-ventilated room. The exact limits to which actual gymnastics should be carried on at home or in a gymnasium, often tax the best judgment of the physician. Nearly all performances require more or less severe straining of the pectoral muscles, and sudden calls upon the heart for increased action."

"While walking, the patient should as frequently as possible (say, every ten or fifteen minutes) take deep inspirations and expirations without straining, from six to eight times in succession; which act completely empties and refills the lungs."

The point so strongly emphasized above, that breathing can only be properly performed through the nose, is one upon which we desire to lay special stress in this connection. We remember a little book, written many years ago by George Catlin, a celebrated artist and traveller among our Indian tribes, in which this subject was treated in a quaint and forcible manner which made considerable impression on us at the time, and we have often wished that the *brochure* could be republished and widely circulated. Savages almost everywhere, according to this author, practise nasal respiration exclusively, being forced to do so by their mothers in early infancy; and civilized parents, he thinks, should train up their offspring in the same way. In this we have no doubt he is perfectly correct. As it is, almost everybody sleeps with his or her mouth wide open, for want of a proper education in the matter. If such education could be universally imparted, a first step would be taken towards reducing the present dreadful fatality from consumption—besides diminishing the liability to contagious diseases, and abolishing the nuisance of snoring.

OUR COMMISERATION.

CHARITY compels us to commiserate the members of our profession called upon to treat those individuals who are so claimed by the public that the lay press is constantly parading the names of the medical attendant, until it must become most distasteful to one possessed of any reasonable degree of modesty.

An instance of lay impertinence has recently occurred in one of these cases which must have been exceedingly annoying to the medical gentlemen in charge.

The lay press discusses medical subjects with that nonchalance which might be expected of the tyro, and the poor public is more befuddled than ever, and left in doubt as to the true state of things. Any physician of experience in such cases has seen an epithelioma fluctuate in its progress, and knows the prognostic value of the apparent improvement. The opinion of one who knows nothing of the disease is just as valuable as it would be of any other subject of which its author was equally ignorant.

It would be quite easy for medical men to modify this state of things, should they look at it in its true light and feel so inclined.

If instead of signing the bulletins issued, setting forth the condition of their distinguished patient, they would write something after this style, we think it would be in much better taste and not offend the most æsthetic:

"The attending physician makes the following statement regarding the condition of the patient," etc., etc.

Unimportant pathological detail should be omitted to the public, and the profession should receive, through its own press only, such interesting or peculiar conditions or phenomena as would be vouchsafed in any ordinary case, as the condition in life or the standing in the community has no influence upon the value of scientific data.

We are confident that it is an injury to the profes-

sional man to have his name paraded in the daily papers until the public become nauseated with its very sight, and the modification to a certain extent is within the power of the attending physician in any particular case.

THE Massachusetts Homœopathic Medical Society through its Committee of Registration and Statistics have issued an exceedingly interesting report of the membership of the society during the past forty-five years. In the by-laws we find the emphatic declaration that "the society demands for itself absolute liberty in science, and hence requires of its applicants for membership no creed or confession of medical belief, but only to express a willingness to act for the furtherance of its declared objects." These objects are specially the proving of drugs upon men and animals and the administering of medicine, thus proved, to the sick in accordance with the formula of *similia;* also the study of special subjects and reports calculated to improve its members in the collateral branches of medicine.

A glance at the list of 196 working members shows the names of many of the most intelligent and successful practitioners of any school in the State.

The good work which the society is doing is materally aided by the broad and liberal policy pursued by the Boston University and the excellent clinical advantages of hospitals and dispensaries which are utilized by the faculty in their instructions.

BIBLIOGRAPHICAL.

WOOD'S LIBRARY OF STANDARD MEDICAL AUTHORS. Wm. Wood & Co., Publishers.

The monthly volumes of this library are now looked for with marked interest by a very large number of physicians, who are thus enabled to secure a large variety of some of the best medical literature of the day at a very low price.

The volume for January is the sixth edition of "Holder's Human Osteology." The work has so long been a standard text book in the profession as to render any extended notice unnecessary. February and March give us the eleventh edition of "Kirke's Hand-Book of Physiology," in two volumes, with nearly 500 illustrations. There is no better guide for students, especially in the early period of their career, and while this work, in the statement of well-established facts, is brought fully up to the present time, controvertible matters have been wisely omitted.

The April issue is the fourth edition of Dr. Eustace Smith's "Wasting Diseases of Infants and Children." This work is a very important addition to the library, treating in detail of subjects which are too often neglected. The diet tables are excellent and worthy of careful study, and every subject discussed shows not only a thorough acquaintance with scientific facts but a practical clinical knowledge gained by close observation.

One of the best of the clinical manuals issued by Lea Brothers & Co., Philadelphia, is "Insanity and Allied Neuroses," by George H. Savage, M.D., in which the author traces, in clear and intelligent language, the life history of insanity in its various phases and varieties. Dr. Savage has been, for many years, at the head of Bethlehem Royal Hospital, and his work is full of just that practical information which every physician needs in making up his diagnosis and in reaching a correct understanding of the legal relationships of the insane. These manuals can easily be carried in the pocket and for ready reference are of great value.

There will be issued by the New England Publishing Co. Sandy Hook, Conn., during the month of May, a book entitled "Berlin as a Medical Centre," by Horatio R. Bigelow, M.D., of Washington, D. C. This book will be a complete and accurate medical guide to Berlin, giving instructions in reference to board, clinics, lectures, expenses, etc., and all information that will be necessary for the medical student abroad. The price will be $2.00.

OBITUARY.

JOHN BUTLER, M.D.

DR. JOHN BUTLER died at his residence, No. 110 East 26th street, April 10, in the forty-second year of his age. The cause of his death was pyæmia, produced by an abscess. Dr. Butler was a graduate of the College of Physicians and Surgeons, in Edinburgh, and of Trinity College, Dublin. He was best known to the profession as a specialist in electro-therapeutics. The early readers of the TIMES will remember a very interesting series of articles which appeared in its columns some years ago, from his pen, upon electro-therapeutics, which were afterwards published, with additions, in book form. The work is now used in several schools of medicine as a text book. Recently Dr. Butler's attention has been specially directed to what is known as the Salisbury treatment, in which he was meeting with very marked success.

At the stated meeting of the New York Medico-Chirurgical Society, April 14, the following resolutions were passed.

Whereas, Our colleague and friend, John Butler, A.M., M.D., has been removed from us by death.

Resolved, That in this, the first death among our number we, the New York Medico-Chirurgical Society, have lost an esteemed friend and valued colleague,

Resolved, That we extend to the family of the deceased our sincere sympathy in their bereavement, and that a copy of these resolutions be transmitted to them and published in the NEW YORK MEDICAL TIMES.

JOHN C. MINOR, M.D.,
EDWARD P. FOWLER, M.D.
JOHN L. MOFFAT, M.D.

DR. BENJAMIN F. JOSLIN died at his residence, Montclair, N. J., April 20. Dr. Joslin retired from practice on account of ill health, about two years ago. His father, Dr. Benjamin F. Joslin, was one of the pioneers of homœopathy in this city.

RESORCIN IN THE TREATMENT OF POISONED WOUNDS.—Andeer (*Monat. f. prakt. Dermat.*) reports a series of cases in which dissection wounds accompanied by inflammation of the lymphatics, and in some cases by constitutional disturbance, were treated with applications of an ointment containing equal parts of resorcin and vaseline. The urine showed the greenish color indicative of absorption of the drug, and in every case the pain and inflammation were relieved within a few hours.

CORRESPONDENCE.

SOME (GENERALLY) OVERLOOKED PRECAUTIONS AGAINST CHOLERA.

To the Editors of the N. Y. Medical Times:

WHILE the medical profession are expecting the advent of cholera in this country this year, and are preparing for it by informing the popular mind concerning its nature, and the necessity of sanitary action, etc., in resisting its inroads, yet we have seen no evidences of a disposition on their part to act the part of alarmists. Yet there is always a large proportion of every community, however well informed, which, by reason of inherent timidity, will become restive, and under pressure, "panicky." Already the expected epidemic enters largely into the summer plans of many families, and a very large number are already (and to an unprecedented degree) locating themselves in the country, in advance of the usual time at which the annual city hegira commences.

And yet, eagerly as many (of both those who go to the country to avoid the cholera and those who expect to be obliged to face it in town) seek every item of information as to diet, hygiene, and personal care of themselves and their surroundings, there is a source of danger which, for the most part, is sadly overlooked, viz., the want of physiological and *mental rest.*

In the January number of *The Alienist and Neurologist*, a magazine whose value we have frequently brought to the attention of our readers, the editor presents this phase of the subject in a most masterly manner, and we feel that we are serving the best interests of our own friends, both professional and lay, by presenting portions of it to their consideration.

Dr. Hughes' article is entitled "The Hygiene of the Nervous System and Mind." (The italics are our own.)

"Though by sight of science we have probably found the cholera bacillus (the bacillus of cholera Asiatica and of cholera nostras, perhaps) we cannot yet, entirely by power of science, keep this potent living infinitesimal from evil, yet we can resist and circumvent its power, not alone by clean streets and dwelling places, sunlight into the dark places and disinfection and pure air where dirt and filth abound, but by clean and strong bodies and by *well sustained, well rested, invigorated and tranquillized nervous systems*, built up to the power of resistance to the very maximum of physiological strength, not stimulated spasmodically by sudden fright after the pestilence has come, but trained up in advance by adequate but temperate nourishment; by ample rest of brain for the fullest possible recuperation, each night, of the day's wasted power; by making cities profoundly quiet in time of the pestilence *by interdicting the needless noises both day and night, which keep the cells of the brain and nervous system agitated and restless*, when they might be restful and in condition of repair for more work; and by a trained abeyance of the passions, the abandonment of exhaustive vices which undermine the nervous system and fit it to succumb to light assaults of disease.

"*To this end, in anticipation of an invasion of cholera here next year, the prudent will finish up, before the epidemic comes, present business enterprises which promise unusual mental strain, worry or other tax on their powers, and permit a little of that reserve nerve force to accumulate, which, hitherto, like an improvident man with his bank account, they have been in the habit of expending as fast as it has accrued.* Cholera is not in strictest sense, a filth disease, at least in this country, though filth by contaminating the atmosphere and thus impoverishing the blood and imparing the nervous system, furnishes favorable conditions for its taking hold on the organism. On the contrary, putrefaction bacteria, as Koch asserts, destroy the comma bacilli or arrest their multiplication. *Alcoholic stimulation*, at least to dissipation so-called, *must be abandoned;* the physiological tone of the vaso-motor system maintained and the perfect stability of the higher cerebral centres—the psycho-motor and psychical—must be permitted to become re-established up to the point of their highest resisting power. Habitual alcoholization is a paralyzant of the vaso-motor nervous system as well as of the cortex of the brain, beyond all doubt, notwithstanding it acts as a temporary excitant, and momentarily stimulates latent power into increased activity. The frequent habitual use of stimulants like alcohol exalts the heart's activity, exhausts the tonicity of the brain by causing it to expend its latent reserve power daily; and leaves its vessels dilated and its substance oppressed; the cerebro-spinal fluid is crowded out of the perivascular spaces and the brain is prepared then for apoplexia and coma. *Tobacco*, too, is a vaso-motor paralyzant and motor depressant and weakener of vital power in those in whom tolerance has not been well established, and *had better be used with moderation or abstained from.*

"To the end of proper prophylaxis in regard to the nervous system, *the hours of rest and labor should be regulated by municipal authority*, that over-taxed human beings, especially among the poor, should not be made ready subjects for attack and almost certain victims to the fatality of cholera. *Night work should be discountenanced so far as practicable* and prolonged work hours without adequate rest following should, when practicable, be prohibited.

"The *schools should be looked after;* tasks should be lightened and invigorating relaxation lengthened both for teacher and pupil, and more daylight and pure air let into the school room. Fewer hours of study should be required; overcrowded rooms should not be tolerated, and basement lunch, or recitation rooms, abandoned.

"Those who hold people to service should see that they do not engage in dissipating and exhausting pleasures during hours which should be devoted to sleep, and should enjoin staying at home and resting instead of wasting their nervous powers by frolicking till midnight, and then retiring to be awakened unrefreshed for the morning's work. * * * Saloons should be closed at an early night season, if not during the day, in times of epidemic, and men, before they get dead drunk in them, should be taken home and put to bed by the police.

"All causes, public or private, of depression of the nervous system, should, in times of this epidemic, be avoided; *long and exhaustive funeral services*, especially in crowded and illy-ventilated rooms, tiresome and ostentatious funeral processions, cars and rooms vitiated by tobacco smoke and depressing human exhalations.

"Men may deny that nature's God commanded the Sabbath day for rest, but physicians know that imperious nature demands it, if longevity of human life would be reached The law of Moses commanding a respite from customary labor one day in seven was founded in physiological wisdom, nature and nature's God inspired it. And for this reason physicians should demand that the sounds of busy industry should cease one day in seven, that the ceaseless bustle and din of business, which so tries the nervous system during the week, shall cease each seventh day, for one of recuperative rest to brain and mind; that all needless noises which harshly grate upon the ear and rob tired nature of needed repose should be suppressed, in order that enough of sleep and rest, 'sore labor's bath,' 'tired nature's second course, may come to the people of the heart of the city to 'knit up the week's ravelled sleeve of care.' *There is too much unnec-*

essary noise even on ordinary business days, and too much noise allowed in the night time, and altogether too much on Sunday for the highest health of the people of our great American cities.

"The wealthy suburban resident does not suffer so much from this cause of nerve disturbance as the working man and subordinate business man who lives down town, but the needless wear and tear of brain and nerve from unnecessary and preventable city noises, if prevented, would add very materially to the healthful endurance of the people in time of cholera and at all times, prolonging life and averting insanity and premature failures of the nervous system in other directions. *To be well repaired, man, like any other machine, must rest, and rest of brain and nerve is disturbed through the channels and centres of audition and sight, as well as through those of motion, etc.*

"The prayer of conservative physiology is for rest, for the salvation of the resisting power of the nervous system to devastating pestilence; and the power of resisting and sustaining disease in general, is obtained by adequate rest of the organism, which is a condition of its repair and power.

"The cause of much of the premature decrepitude and nerve degeneracy, and breakdown of our day, is in the many inventions man has devised whereby he robs himself of timely rest. The morning newspaper often read through before breakfast; the telephone in his house to call him at any and all times aside from his repose; the electric light to keep his brain unduly stimulated through the retinæ; the railroad and the sleeping coach which may keep him constantly on the rail (if he chooses to so travel) for continuous weeks without rest from the noisy and exhaustive cerebro-spinal concussions of this mode of travel; hasty meals and telegrams, and business, and nightmare sleep, all commingled, wither and wreck lives innumerable, which, under wiser management might end differently, and the needless noises of the city, the bells and steam whistles, howling hucksters, noisy street cars, yelling hoodlums, that make night hideous with soul-jarring sounds, hasten the premature endings of useful lives. And when, superadded to all this unphysiological strain, we have the assault of a pestilence that poisons, like cholera, how much exemption can such overwrought organisms expect? How much of resisting immunity can such overstrained and exhausted nerve force oppose to the invading foe?

"If the epidemic comes, as it almost surely will next summer or fall, *there should be a common understanding among physicians to demand as much rest as practicable for the people*, and, by comity among themselves, *they should lighten each other's labors* and no one should work continuously night and day.

"It is not long after an epidemic comes before the long watching nurses and the tired, over-taxed doctors become its victims.

"The lesson a pestilence teaches is not only cleanliness but temperance, and restful resisting vigor for the nervous system and the conservation of its powers, maintaining the functions of the body in the presence of a blood destroying and vitality depressing enemy. With the human organization, in a long contest with disease, the blood is the life, but if the nervous system have secured to itself, by ample rest and frugality and economy of expenditure; and by freedom from overstrain and vicious indulgence, have established the habit of claiming and securing to recuperative use its own elements from the blood, it will be long in yielding and longer still in perishing under the assaults of disease.

"The inferior animals, too, whose nervous systems are unshattered by the vices and overstrain of civilization, are more exempt than man from cholera.

"*Many a man well endowed and unweakened in his nervous centres goes about unharmed with the same amount of malaria in his blood, probably, which causes another, less strongly fortified, to succumb to a fatal form of congestion.*

"All other things being equal, the tranquil-minded and restful and daily and adequately recuperated nervous systems of a community afford the best and longest immunity in time of pestilence. The unrested and unrestful, the weary and the heavy laden, the vice-broken and the unsteadily endowed nervous systems furnish the most numerous and earliest victims."

H. R. S.

TRANSLATIONS, GLEANINGS, ETC.

NEUROSES OF THE GENITO-URINARY ORGANS.

BY PROF. ROBERT ULTZMANN, OF VIENNA.

Translated by W. Storm White, M.D., New York.

THIRD ARTICLE.

(*b*) THE MOTOR NEUROSES of the genito-urinary track sometimes appear as causing cramps, and at others a lameness of the part. The best example in the urinary apparatus is found in its most muscular part, the bladder. They are not so marked in the urethra, yet there is a peculiar condition which may be directly referred to cramps in the organic muscle fibres of the urethra as its cause, namely, a more or less profuse dribbling of urine after micturition, which worries the patient and makes him seek a physician. They complain that after having completely emptied the bladder, expelled the last drop from the penis, buttoned up their clothes and taken a few steps they suddenly feel that only a few more drops or a larger quantity of urine flows from the urethra, which may soak their clothing all the way to their knees. This phenomenon may best be explained by assuming that a small quantity of urine has remained in the urethra, which retention is favored by the contraction of the muscle fibres, making the walls more resistent, by which the urethra becomes, to all intents and purposes, a tube with stiff unyielding walls. The urine can no more escape under these conditions than it could were it contained in a glass tube having one end closed. When the relaxation occurs, the contents of the urethra dribbles out, in precisely the same manner as a fluid would if contained in a tube having thin soft walls, for example, water placed in a gut will escape, even if one end be tied. Similarly the so-called dribbling of urine may be referred to a condition of cramp in the organic muscle fibres throughout the whole extent of the urethra.

Cramp of the external sphincter of the bladder (spasmus sphincteri vesicæ) is of much more importance. The patient complains that though the desire to urinate is not over-frequent, yet when he has such a desire he finds it difficult to find relief. Sometimes they must wait and strain from five to ten minutes before any urine appears, which will at first flow drop by drop, then in a thin stream, and finally in a full, thick normal stream. Towards the close of micturition, the stream again diminishes, flows drop by drop, stops, and, after buttoning up, will allow the escape of a few drops more. They also complain that they cannot urinate, although they have the desire, and must leave the urinal without accomplishing their purpose.

The reason that some persons, and particularly if they are very nervous, cannot urinate in any one's presence is found in a very slight degree of cramp in the sphincter vesicæ. The cramp of the muscle is not always so harmless, as it may be so

powerful as to cause retention of urine. I remember distinctly a case where micturition was only possible after a strong injection of morphine. The patient could urinate only while sitting at stool. The urethra was so sensitive that the sound could only be introduced after narcotization, when it was passed without further resistence. Cramps of the sphincter have caused many mistakes. When voiding of the bladder was interfered with, it was formerly thought that there must be either disease of the prostate or a stricture. Stricture was then employed in its broad acceptation as comprising both inflammatory and nervous or cramp strictures. This latter, or spasmodic, stricture is always cramp of the external sphincter. The cause is usually a disease of the pars prostatica urethræ or of the prostate itself. The sphincter, which encloses the greater part of the pars prostatica and membrancea contracts spasmodically when the irritability is localized within the limits of its distribution. Analogous to this condition, we find spasms of the sphincter when catarrhal ulcerations, fissures or even simple inflammatory processes in the rectum are presented, and, therefore, we must not be surprised at such phenomena being developed at the neck of the bladder from irritation at that point, or occurring reflexly from diseased conditions of the rectum. Such an irritation may also become localized in the pars prostatica by gonorrhœa or onanism. In prostatitis catarrhalis gonorrhoica following gonorrhœa we are always able to discover the thick gonorrhœal fibres in the urine. In the condition caused by onanism, the pars prostatica is found to be very sensitive and bleeds easily on introducing the sound, without any previous inflammation or gonorrhœa; and we may, therefore, assume that hyperæsthesia, hyperæmia or even superficial catarrhal erosions have become localized in the caput gallinaginis.

Explorations with the sound meet with the greatest difficulties and require a practiced hand. The introduction is most easily accomplished with the largest possible cylindrical metal sound, having a well rounded end. Soft instruments cannot be used, as they are arrested at the isthmus. Thin instruments are never to be recommended for this purpose, especially thin metallic catheters, as they are really dangerous, the slightest carelessness producing wounds and *fausse routes*. After selecting the proper sound, it is introduced very gently but steadily, with a continuous motion, as far as the isthmus, holding it firmly between the thumb and index finger. Here a pause is made and the blunt point of the sound is pressed firmly and continuously against the isthmus. After waiting a longer or shorter time, the cramp suddenly relaxes, and the sound easily passes into the bladder. If the catheterization had been forcible and the instrument moved about freely because an entrance could not be gained, there would have resulted a still more violent cramp of the sphincter, and the bladder could not have been reached. From the foregoing we can easily understand how stricture may be diagnosed by physicians who have had but little practice in such matters, when in reality there was only spasm of the external sphincter. In medical literature we also find mention made of cases as *curiosa*, where external section of the urethra was undertaken for stricture, and the stricture has entirely disappeared under narcotization, and allowed of the passage of very thick instruments, to the astonishment of the operators.

Therapeutic measures must be directed towards rendering the sphincter easily permeable by catheters. This is most easily accomplished by the daily passage of thick metal sounds and allowing them to remain in the urethra from five to fifteen minutes. This treatment alone usually produces normal micturition. In stubborn cases, however, if erosions or fissures exist at the neck of the bladder the pars prostatica urethræ must be cauterized with the nitrate of silver. Cramp of the bladder (cysto-spasmus) is much more frequently accompanied by urging to micturition and must be considered as cramp of the muscles of the bladder.

Spasmus detrusorum vesicæ also makes its appearance in diseases and irritable conditions of the central nervous system, and especially as reflex neuroses in anomalies of the urethra, particularly in those of the pars prostatica.

Frequent urination is also present with strong emotions, anxiety and fright, especially in individuals of a nervous temperament, or who have undergone strenuous physical and mental exertion, after the use of large quantities of fluids, particularly if they contain much carbonates or free carbonic acid.

Very frequently, also, onanism and especially sexual excesses, by which long-lasting, unnatural erections are produced, cause hyperæmia, slight catarrh and hyperæsthesia in the pars prostatica and caput, and, by reflex action, an increased muscular contraction. Even after natural coitus there is frequently an increased desire to micturate, more than at other times. Gonorrhœa, with epididymitis or prostatitis is frequently followed by spasmus detrusorum. Also the same result is produced by strongly acid concentrated urine or that rich in uric acid. Diseases of the rectum (fissures, catarrhal ulcerations, etc.) sometimes produce spasmus detrusorum, although these conditions are more frequently accompanied by spasm of the sphincter.

By the term spasmus detrusorum vesicæ we understand a frequent and generally painless urging to urinate. This usually occurs mostly in the day-time with mental and bodily activity. At night there is generally no desire as long as the patient sleeps quietly; if he is restless and sleepless, it is increased. It may occur every hour, or every ten or fifteen minutes, and is so pressing that they have to hurry in order to reach the urinal before they involuntarily wet their clothing. This is directly opposite to the condition found in spasm of the sphincter.

The urine is usually pale and clear, of light sp. gr., neutral or slightly acid, with polyuria (urina spastica, nervosa). It is sometimes voided turbid and alkaline without the presence of catarrh of the bladder or the internal use of alkaline mineral waters. In such cases we must imagine an abnormal urine, produced without an apparent cause being found in the kidney, and therefore, a perversion of the normal secretion of urine due to a secretory neuroses of the kidney. If the urine is neutral or weakly alkaline we observe the clouding by heat due to the presence of neutral earthy phosphates, which disappears on the addition of acetic acid. The discovery of these neutral earth phosphates in connection with the neutral reaction of the urine, strengthens our diagnosis of some neuroses of the genito-urinary apparatus, especially of nervous urging to urination and cysto-spasmus. Certain abnormal constituents are sometimes found in such urines, as has been noted in speaking of "the urine in neuroses."

If the spasmus detrosorum follows a gonorrhœa, we find short thick gonorrhœal fibres, such as usually originate in the pars prostatica.

The urethra is very sensitive on the introduction of the sound, especially in the pars prostatica. *A negative result on exploration with the sound and the normal condition of the urine, or the discovery of neutral phosphates by heat, in connection with neutral reaction of the fresh urine substantiate the diagnosis of cysto-spasmus.*

If thick gonorrhœal fibres are also found in the urine, we probably have to deal with cysto-spasmus originating in a reflex neurosis in the pars prostatica. In this case different

indications have to be met therapeutically. We have to do with a spasm of the bladder originating from irritation affecting the central nervous system, and first of all, this must be removed. For instance, the patient must desist from his strenuous mental exertions or from his sexual excesses. Other harmful causes, as pain or fear, may produce permanently bad results, and much good may be derived from traveling, going to the country, sea-baths, cold water cures, or medicated baths, etc. If these are not obtainable, we must procure for the patient the utmost possible pleasant surroundings.

The internal remedies which will give the most satisfactory results are bromide of potash in large doses (three to four grammes daily), or quinine, iron and arsenic in the usual doses. Morphine, or other narcotics, in the form of suppositories temporarily relieves the persistent urging. If the cysto-spasmus can be traced to onanism, sexual excesses or gonorrhœa, local treatment of the pars prostatica must be employed, as the introduction of sounds, or of astringents by means of short metallic catheters, as will be described further on, in connection with warm compresses and bathing the parts with warm water.

DISEASE AND WATER IN INDIA.—In connection with the interest which now attaches to the condition of tank-water in India, we would refer to an excellent lecture on the relation of wholesomeness of water and the maintenance of health, which was delivered some two years ago to the native population by Dr. M. C. Furnell, Sanitary Commissioner for Madras. The lecture fully confirms, by means of its numerous details, the views that have been so often expressed as to the facilities which are afforded by the tank-water supplies of India for the diffusion of infectious diseases, and especially of cholera and of enteric fever. Men and women habitually wash their clothes and garments and then bathe their bodies in the same tank from which they take their water for domestic purposes; the approaches to some of the tanks are filthy in the extreme, and Dr. Furnell has even seen women collecting water for home purposes, when the contents of the tank have at the some moment been in use for ablution, being foul to the senses of sight and smell. So long as conditions such as these remain, it must be obvious that one of the most fertile and well-known channels exist for the rapid diffusion of cholera, and it is impossible to prove that the aërial communication of this infection is the one which is most commonly in operation. The multiplication of such lectures to the native population would be most useful, and we are glad to note that, in addition to the circumstance that the Bombay Government ordered Dr. Furnell's lecture to be translated into the vernaculars of Northern and Southern Deccan, Gujerat, Sind and Arabic, it has also been reproduced in several other languages.—*Lancet.*

CATHETERS AND SELF-CATHETERISM.—While much more common in England, yet, the custom of *self-catheterism* is becoming more usual in this country. And as gum catheters (the kind most in use) become very sticky, increase in bulk and deteriorate in quality, becoming very liable to break off in the urethra, it is with much satisfaction that we note that Dr. J. B. Mitchell states in the *Medical Press*, June 25, 1884, that a catheter that has been smeared inside and outside with oil, when exposed for an hour or two to the action of pyroxylic ether, is as clean and smooth as it was before use. He also suggests a most excellent method of using oil for lubricating purposes. When a certain quantity of castor oil is, by exhaustion at the superior orifice of the catheter, sucked into the tube of the instrument, it does not at once seek to escape, but keeps its place till the constricted part of the urethra is reached. The catheter, with its internal as well as external charge of lubricant, having arrived at the point where resistance has to be overcome, pressure of a stripping character exerted between the finger and thumb, in a downward or inward direction, upon the extruding upper end of the instrument, by expelling the oil with which its opposite end is charged, floods the urethra with the lubricant at the constricted part, and bears along, as it were, the catheter point through the prostatic rapids, landing it safely in the bladder. Experience has abundantly shown that the flooding, when copious, is always completely effectual in the shooting of the urethral narrows. —*Medical and Surgical Reporter.*

THE "LANCET" ON NARCOTICS.—Again we have to record, with deep regret, a sad proof that those who give or take chloral, or bromide of potassium, for sleeplessness, are guilty of a deplorable error and do a grievous wrong. The narcotics which poison sleep also deprave the higher nervous centres, enfeeble the controlling power of the will, and leave the mind a prey to the depressing influence of a conscious loss of self-respect and self-confidence. The cultured mind feels the ignominy of this intellectual and moral depreciation with great acuteness, and in the end succumbs to the sense of powerlessness to recover self-control and do right. The deprivation wrought is purely physical. The baneful influence of the lethal drug is, so to say, organic. The essential elements of the nerve tissue are blighted by the stupefying poison, as by alcohol in habitual drunkenness. In short, the recourse to chloral and bromide is precisely the same thing as a recourse to alcohol. The man or woman who is sent to sleep—the mocking semblance of physiological rest (will not this apply to all soporifics?)—by a dose of either of these narcotizers is simply *intoxicated*. No wonder habitual drunkenness of this class first impairs and then destroys the vitality of the mind organ, and places the subject of a miserable artifice at the mercy of his emotional nature, and makes him the creature of his passions. When will the public awake to the recognition of facts with regard to the use of these most pernicious stupefacients? Persistence in recourse to them has no better excuse than unwillingness to take the trouble to search out the cause of the wakefulness which prevents natural sleep.

Dr. J. T. Kent writes as follows on this subject:

For the pains which come on in the last stage of consumptive changes there is a remedy, and it is *tarentula cubensis;* it soothes the dying sufferer as I have never seen any other remedy do. When death is inevitable, other medicines may seem to be indicated, but no longer act, and the friends say: "Doctor, can't you do something to relieve that horrible suffering?"—the pain, the rattling in the chest, with no power to throw the mucus out. The patient has but a few hours to suffer, but can be made as quiet, in a very few minutes, by the tarentula as by the terrible morphine. I believe that no physician would use a narcotic if he only knew a better way.

NITRO-GLYCERINE IN THE TREATMENT OF EPILEPTIFORM TIC.—Dr. James P. Bramwell, Perth, in the *British Medical Journal* for September 27th, records a case of severe epileptiform tic cured by nitro-glycerine in a patient 80 years of age. Dr. Bramwell had previously prescribed bromide of potassium and croton chloral hydrate, with only partial relief. Solution of nitro-glycerine (01. per cent.) was given in drop doses three times a day. The effect of this was almost immediate, and in four days all morbid symptoms had gone. The patient has since been four months in perfect health, without any return of the fits.

TREATMENT OF FÆCAL FISTULA.—W. Mitchell Banks, F. R.C.S., in his *Clinical Notes*, recommends a most ingenious and simple method. In describing the case in which he employed it successfully, he says: "I introduced a thick piece of india-rubber tubing into the opening, pushing one end up the ascending bowel and the other down the descending. It was fastened by a piece of stout silk, which hung out of the opening, so that it should not become lost. It was calculated that the continuous elastic pressure of the tubing against the projecting spur or eperon would press it back, and so allow the fæces to pass round the corner, without flowing out by the artificial orifice. The tubing was kept in for a week at a time, and was inserted twice or thrice. At the end of seven weeks the patient left the infirmary with nearly all the fæces passing by the rectum, and only a few drops of a yellowish colored fluid exuding from the artificial opening, which was now reduced to the condition of a mere sinus. At the end of three months this completely closed. She was seen recently, the hole having been tight for a year and nine months.

THE IDENTITY OF LARYNGEAL DIPHTHERIA AND MEMBRANOUS CROUP.—(*Hahnemannian Monthly*, March, 1884). Dr. George Allen presents the objections to the arguments of those who regard the diseases as distinct: (1). Diphtheria limited to the larynx is generally a local disease on account of the scanty supply of lymphatics to the larynx. (2). As to contagion, the epidemic appearance of croup is admitted. (3). Croup is rarely a sthenic disease; diphtheria is not, necessarily, adynamic in type. (4). The seat of origin of the affection is of no value in differential diagnosis. Mackenzie places the origin of diphtheria in the larynx in 10 to 12 per cent. of his cases. (5). The absence of faucial trouble does not exclude the possibility of a diphtheritic process confined to the larynx. (6). With such a limited diphtheria, the presence of submaxillary enlargements is not to be expected, because the laryngeal lymphatics empty into the deep cervical glands. (7). Albuminuria is often seen in so-called croup. Epistaxis is not to be expected in a laryngeal diphtheria. (8). The absence of non-diphtheritic paralysis does not exclude diphtheria. (9). There is neither a microscopic nor a macroscopic distinction between the diptheritic and the croupous membranes, which cannot be traced to the difference in the structure of the parts on which they are thrown out.

HOW TO CURE A FELON.—The following mode of treatment is recommended by Dr. C. C. Gratiot, in the *College and Clinical Record*. He has tried it in seven cases of felon without a single failure: Take common salt, roasted on a hot stove until all the chlorine gas is thrown off, or it is as dry as you can make it—teaspoonful; and also a teaspoonful of pulverized castile soap, add a teaspoonful of Venice turpentine, mix them well into a poultice, and apply to the felon. If you have ten felons at once, make as many poultices. Renew this poultice twice a day. In four or five days your felon, if not opened before your poultice is first put on, will present a hole down to the bone, where the pent-up matter was before your poultice brought it out. If the felon has been cut open or opened itself, or is about to take off the finger to the first joint, no matter, put on your poultice; it will stop it right there, and in time your finger will get well, even if one of the first bones is gone.

EFFECT OF PERMANGANATE OF POTASH.—A writer in the *Lancet* says that permanganate of potash, administered in cases of amenorrhœa, produces a profuse painless flow, after from four to twelve grains have been taken.

LOW TEMPERATURE IN PNEUMONIA.—The danger attendant upon inflammatory diseases is generally regarded as existing in proportion to the elevation of bodily temperature, and usually the prognosis is regarded as favorable in cases in which the thermometer registers low on the scale. That this rule is not without its exceptions is attested by a report of three cases by Dr. Janeway to the New York Clinical Society. These cases were of pneumonia, in which the temperature did not exceed 100° F., although there was well-marked consolidation at the base of one lung and some sign of inflammation on the other side. Dr. Janeway thought this low temperature usually foreboded evil. The three cases which he reported terminated fatally. With this low temperature coexisting with well-marked local signs of pneumonia, the disease was formerly classed as asthenic pneumonia.

While in the discussion which followed Dr. Janeway's paper, several cases of low temperature in pneumonia were reported as terminating favorably, the fact of its existence may be regarded as sufficient to place the medical attendant on the alert. —*Medical Age.*

THE SNOW CURE.—From an illustrated paper by W. George Beers, on "Canada as a Winter Resort," in the February CENTURY, we quote the following: "It is by no means every delicate person who should make Canada his winter resort: but it is well known that our winters have cured chronic cases for which Colorado and Florida were alone supposed to be beneficial. I know of patients who were regularly sent to Bermuda and the West Indies, and others to such winter climates as Nice, without more than temporary benefit, who were completely cured by the outdoor life of our Montreal and Quebec winters. I was *en route* from Brandon to Winnipeg, a distance of one hundred and eighty miles by rail, and was caught in a snow-blockade which lasted eight days, and kept us in a situation not likely again to occur. The effect of this exposure upon the health of many of the passengers was remarkably good. One clergyman who had come out from England for some affection of the throat, was determined to do his share of the shoveling. He had very thin moccasins on his feet, and during the day as there was a warm wind, they were wet through. He never expected to see England again, but that one day's work cured him effectually. Other persons suffering from throat and lung affections have not since been troubled. One would suppose the conditions were just those to provoke illness, but the very reverse was the case."

UREA NOT A CAUSE OF URÆMIA.—At a recent meeting of the New York Pathological Society, Dr. Peabody took occasion to show that it would require, according to the amount of urea necessary to produce death by injection into the circulation of the dog, one pound and a half of urea to produce a fatal result in man. But it had been shown that in a man of one hundred and fifty pounds' weight, dying of uræmia occurring in the course of kidney disease, the blood contained only nine one-thousandths of a pound of urea. He thought this showed very conclusively that experiments upon animals could give us little useful information as to the cause of uræmia in man. The injection into the blood of benzoate of sodium, or of sulphate of sodium, agents which were not of themselves poisonous, would likewise produce uræmic symptoms. The experiments cited went no further than to show that the injection of a certain amount of any foreign substance into the circulation would produce death; they did not show that uræmia was due to the presence of urea in the circulation. He had seen several fatal cases in which there had been entire suppression of the urine, but none of the so-called uræmic symptoms.

VINEGAR IN POST-PARTUM HEMORRHAGE.—About ten years since, I attended a patient who had a most violent *post-partum* hemorrhage, so severe, indeed, that I began to despair of arresting it. I had not ergot with me, and ice was not procurable. I directed the attendant to give a wineglassful of pure brandy. The uterus, which was before flaccid, contracted instantaneously under my hand, and the bleeding ceased. On proceeding to give some more brandy, I discovered that the patient had been given vinegar instead of brandy. The effect was so marked, that I inquired of the old midwife who was with me, whether she had ever heard of vinegar being used before; she informed me that in her part of the country it was considered an excellent remedy, but that she had rarely, if ever, used it. When lecturing to a class of pupil-midwives shortly afterwards, I mentioned the case and recommended them most strongly to give the vinegar a trial in case of need. It seems to have escaped my memory until, about two years ago, the midwife at Queen Charlotte's Lying-in Hospital reminded me of my recommendation, and told me she had given vinegar repeated trials, and preferred it to ergot on account of its certain and instantaneous action. She was such a reliable and clever midwife, that I felt her testimony might be taken. Since then I have carefully questioned all my pupil-midwives as to its action, for until recently it was never used in the hospital. They all agree that in their cases of hemorrhage in the out-patient department, where they were allowed to use vinegar, hemorrhage was arrested more quickly than in the hospital with ergot. It was not until recently that I had a good test-case. The patient belonged to a family of "flooders"; her mother and two of her near relations had bled to death. As soon as the child was born, she began to flood. I expelled the placenta, and gave a wineglassful of vinegar. The uterus, which was very flaccid and constantly dilating, at once contracted firmly under my hand; it did not again relax, although the hemorrhage continued to a moderate extent. At the end of fifteen minutes I gave a second dose, about two-thirds of a wineglassful. In both instances it was given pure, without any water. This soon arrested the hemorrhage, and the patient did well. I used no other means beyond holding the uterus, as I was perfectly satisfied with the result. I feel certain that I should not have obtained such favorable results with ergot. The action of vinegar is so rapid, that I refrain from using it or permitting its use before the placenta is expelled, for fear of causing a retention of that body and making its removal difficult. From my own experience, and from the reports obtained from my midwives, pupil-midwives, and house-surgeons, I can confidently recommend the use of vinegar in *post-partum* hemorrhage. It is a remedy, if not always at hand, at any moment procurable, simple and harmless, not open to the objection against ergot, which in the hands of midwives is very liable to be used to hasten delivery, nor to the serious disadvantage and dangers of intra-uterine injections. If further trials, on a more extended scale, confirm my experience, I have no hesitation in saying that vinegar will have to be regarded as almost the specific for *post-partum* hemorrhage. —W. C. GRIGG, M.D., *British Medical Journal.*

THE EXPLORING NEEDLE FOLLY.—The tubular needle furnished with all hypodermic syringes is a far better instrument for exploration than the grooved needle called an exploring needle, and has the additional advantage that it can be used with the needle attached, which, when so employed, becomes a small aspirating pump. The exploring needle should be discarded from all pocket cases, and substituted by the hypo dermic syringe, which is needed also for subcutaneous medication.

FUNCTIONS OF THE SPLEEN.—In the last number of *Virchow's Archiv*, Professor Alex. Tauber, of Warsaw, gives, as quoted by the *Lancet*, an excellent review of the theories concerning the functions of the spleen, closing with the results of his own observations.

The deductions Tauber draws from these experiments, and from clinical observations, are: 1. That the spleen must be regarded as one of the main reservoirs of the blood; its removal, therefore exerts a great influence on the circulation, as seen in the occurrence, shortly after the excision, of congestion of the liver, kidneys, and especially of the lymphatic glands. 2. No physiological affinity exists between the thyroid and the spleen. 3. An animal of middle age bears splenotomy much better than an old animal, hemorrhages being liable to occur in the latter. 4. Animals deprived of the spleen can bear living young, in whom the spleen is present. 5. The removal of the spleen does not impair the digestive function or nutrition. 6. After removal of the spleen the animal becomes anæmic; the relative and positive number of white corpuscles notably increases, while the size and number of the red corpuscles diminish.

BICHLORIDE OF METHYLENE.—Dr. John H. McIntyre, in a communication to the *Medical Brief*, January, 1884, sums up the advantages of using bichloride of methylene in a Junker's inhaler, as follows:

1. Nearest approach to safety of any method yet devised.
2. By giving the anæsthetic vapor in small, known quantities at each inspiration, the minimum of risk is incurred.
3. By allowing the free ingress and egress of air, the second or struggling stage is frequency avoided.
4. Over-rapid narcotism is almost impossible.
5. Vomiting is almost always avoided.
6. The administrator has complete control over the anæsthetic.
7. At each inspiration, the patient is furnished with fresh air and fresh vapor.
8. Rapid return of consciousness, when the anæsthetic is discontinued.
9. Economy in the use of the anæsthetic.

DILATATION FOR FISSURE OF THE ANUS.—This method is discussed at some length in the *Revue de Thérap.*, for February, 1884. Gradual dilatation is not recommended by the authors, but forced and rapid dilatation is said to give excellent results. The index finger may be used for the purpose, but the thumbs are generally too short. Mollière, Verneuil, Trelat, and others, make use of expanding specula of various forms. An enema must be given on the day before the operation and the administration of an anæsthetic is generally advisable. The dilatation is known to have been sufficient when two fingers can be introduced together into the rectum without feeling of resistance. The patient can resume his occupation after two days. Incontinence of feces does not occur after rapid dilatation.

TAPE WORM.—Dr. J. H. Thompson has brought away the entire worm, in several cases, by using a preparation composed of chloroform one drachm, simple syrup one ounce, one-third of which was given at seven, nine and eleven o'clock, having previously fasted for twenty-four hours, followed at twelve by an ounce of castor oil. In every case the entire worm was thrown off in a couple of hours after taking the oil.

DETERMINING SEX.—Dr. Andrew Wilson says that post-menstrual impregnation produces a female, and pre-menstrual fertilization, a male child; which does not stand the test of experience.

A NEW USE FOR EUCALYPTUS TREES.—The patenting of a process for the manufacture of a preparation of a gum of the eucalyptus globulus, which has the effect of thoroughly removing the scales which form on steam-engine boilers and preventing rust and pitting, has created a largely increased demand for it both in this country and in Europe. The effect of this preparation in preventing the pitting and corrosion of boilers will, it is expected, extend the period of their usefulness one hundred or one hundred and fifty per cent, and at the same time effect a great saving in fuel, as scale is a non-conductor of heat. The company owning the patent, at Piedmont (Cal.), have also embarked in the distillation of essential oils of the eucalyptus globulus, which have heretofore been supplied by Australia, it being found that the oils can be produced at profit. With this object in view, the company propose to set out extensive forests of eucalyptus trees, in order to have at its command a sufficient supply of leaves, the portion of the tree consumed in the manufacture of the oils.—*Western Druggist.*

ENLARGED PROSTATE.—(Dr. G. O. Smith, *Medical Summary.*)—I do not believe the enlarged prostate of old age can be absorbed or removed or really benefited by treatment. The trouble is essentially mechanical, causing by pressure an obstruction to the passage of urine through the urethra, as well as of feces through the rectum upon which it bears. It is plain that these are persistent and troublesome cases. Catheters made to hug the anterior wall of the urethra will be the most successful, but the time will inevitably come when the urethra will be so blocked up that the most skillful operator with the catheter will fail—what then? The urine must be got rid of. Modern surgery has come to our aid with that blessed instrument, the aspirator, but the instrument is a little expensive especially to young beginners afflicted with poverty, and it is also cumbersome. These considerations led the writer to reflect, why use the pump to pump out the urine through the aspirator needle? The bladder is like an elastic rubber ball, ready and more than willing to force out its contents if we only furnish a road by which it can flow. These thoughts were put in practice, I bought a small sized aspirator needle, slipped over its butt a rubber tube for a conductor, wound it firmly about the grooves at the base of the needle with a cord, and for about two dollars or less I was ready to operate. Plunge in the needle, drop the rubber tube about a yard long off the side of the bed into or over the chamber, and the urine is meandering its way hastily from the patient.

"'Tis music to the sufferer's ears,
'Tis life, 'tis health, 'tis peace."

As soon as relief is obtained and before the bladder again fills up, try and introduce a small-sized catheter, say 7 or 8, and from time to time increase to 9, 10 and 12, and so dilate the urethra, and establish a more open passage, which is the only cure.

DIAGNOSIS OF EAR DISEASES.—Roosa, in the new edition of his text-book on the ear, has attempted to formulate the elements of a diagnosis between labyrinthian and middle-ear deafness, and has tried to place the tuning-fork in its proper place, as a means of differential diagnosis. Categorically stated the facts are these:

Disease of Middle Ear:

Bone conduction better.
Better hearing in noise.

Disease of Acoustic Nerve—either primary or secondary:

Aërial conduction better.
Worse hearing in noise.

A SHORT WAY TO THE METRIC SYSTEM.—When making use of a two ounce mixture, remember that the number of grammes ordered of any medicament should be exactly the dose in minims or grains of the medicine. In other words, write for a two ounce mixture the same number of grammes of a remedy that you wish grains or minims administered. This is a very remarkable coincidence, and reduces metric prescription writing to a play spell, as no arithmetical calculation is needed to properly apportion the quantity of a drug after once knowing its dose in grains and minims.

As an example: Say you wish to give one minim of belladonna, fluid extract, two minims of nux vomica, fluid extract, and eight grains of bromide of potash, at a dose, it would be written thus:

		GRAMMES.
℞	Fl. ext. belladonnæ.....	1
	Fl. ext. nucis vomicæ.....	2
	Potassi bromidi.....	8
	Aquæ menth. pip., q.s., ad.....	64

You thus virtually substitute grammes for minims and grains, and that is the end of the matter. If you wish to order a four ounce mixture, you simply write double the quantity of grammes that the dose of the remedy is in grains or minims. If you wish the dose to be in tenths of a grain or minim, then you write that many decigrammes. If you wish the dose to be in hundredths of a grain or minim, then you write that many centigrammes. A contra rule is as follows: Reduce all apothecaries' weights or measures to metric terms by multiplying grains or minims by six and one-half, giving centigrammes; drachms by four, giving grammes; ounces by thirty-two, giving grammes.—*Leonard's Illustrated Medical Journal.*

TREATMENT OF PHIMOSIS WITHOUT CUTTING OPERATION.—Recently a child, aged 18 months, with a tight phimosis, was placed under ether; I then inserted within the prepuce the end of a pair of dressing forceps, expanded the blades, and, with great ease, retracted the prepuce behind the glans. The facility and rapidity with which this was done (the whole process being almost momentary) and the satisfactory results, lead me to doubt whether it is justifiable to submit any infant to the risk, however slight, attending circumcision (to say nothing of other objections), and in the case of adults (for whom Mr. Richmond's ingenious instrument appears especially intended) it seems to me highly probable, at any rate, that a similar proceeding could be well borne without anæsthetics, and that it would be preferred by the patient to a tedious gradual dilatation.—HERBERT L. SNOW, in *British Medical Journal.*

ACUTE PAINFUL PARAPLEGIA.—This is the name given by Dumolard, of Vizille, to a peculiar form of paraplegia observed by him in five patients, and described by him in the *Revue de Méd.*, July 10, 1884. It begins by a sensation of pain and stiffness in the back, soon followed by the appearance of the same symptoms in the lower extremities, and sometimes in the arms. The pain increases gradually, and may become excruciating. Fever is unusual, and the general health remains good. The reflex movements are much increased; but the legs can only be moved with much difficulty by the patient, and there is often paresis of the bladder. After an acute period lasting from ten to fifteen days, the symptoms begin to disappear, and in four or five weeks the patient recovers entirely. Dr. Dumolard thinks that this disease differs only in degree from the epidemic paraplegia observed fifteen years ago at Anzannon, in Spain, and described by Bockhammer.

STATE BOARDS OF MEDICAL EXAMINERS—RECENT EFFORTS FOR THEIR ESTABLISHMENT.—At the last meeting of the Ohio State Medical Society, a resolution was passed calling for the appointment of a State Board of Medical Examiners, who should examine all who desire to practice medicine in Ohio, whether they be graduates or not. None of these examiners were to have any connection with any medical college. The diplomas of all medical colleges were no longer to count as licenses to practice medicine. The resolution was vigorously opposed, but the fact that it could be carried indicates the strength of the movement among such as attend the State Society meetings.

The Indiana State Medical Society passed a resolution affirming the desirability of such a movement. The New York profession are, and have been, laboring to accomplish the same purpose.

Of all the schemes for benefiting the profession by legislation, we regard this as the most hopeful. It makes medical colleges simple educational institutions, rather than license-vending mills. The honest, competent medical colleges will then stand a fair chance. If the Examining Board be efficiently constituted all will have to do better teaching or shut up. Students will not continue to attend such colleges as do not train them that they may be able to pass the State examination. In fact, private tutors will have as good show as they do in New York in fitting college graduates so that they can pass the examinations needful to enter the place of hospital internes. That the agitation will go on with increasing vigor there can be no doubt. The past record of the movement fully shows this. The constant overcrowding of the profession will lead to more and more careful scrutiny into the causes which induce it, and the means for removing these causes.—*Detroit Lancet.*

UNUSUAL EFFECTS OF ERGOT.—Dr. R. B. Faulkner, *New York Medical Journal*, reports a case in which a healthy woman, aged 25 years, miscarried April 5th. The after-hemorrhage continuing, twenty drops fl. ext. ergot was ordered three times a day on May 20th. On May 24th no perceptible effects having been observed, teaspoonful doses three times a day were directed, the first dose being taken in the evening. On the following morning the patient's forearms, hands, legs and feet were red and swollen, the lower limbs being sore, tender and heavy; the patient was nervous, restless, cold and sleepy. There were pricking sensations in the limbs, and when the eyes were closed she thought she saw lightning. On the following morning these peculiar symptoms had passed off, but very soon returned after taking another dose of ergot. Squibb's ergot was used, and the discharges were decreased.

A CHEAP BATTERY, constructed by Bennet, has been brought before the London Physical Society. An iron cell forms at the same time the negative plate and the containing vessel. In this is a porous cup containing a zinc plate passing through a paraffined cork as a cover. The fluid for this battery is caustic soda, which is electro-negative to zinc, and in which iron does not rust. Iron filings around the porous cup facilitate its action. The electro-motive force is estimated at about 1.14 volts, becoming stronger after a few days' standing.

COCAINE IN ACUTE CORYZA.—Dr. W. S. Paget (*British Medical Journal*) has produced gratifying results by the application of a four per cent. solution to the interior of the nostrils by means of pledgets of cotton. Permanent relief was experienced after a single application. The solution may also be injected into the nose. The writer believes that cocaine will become the remedy *par excellence* in hay fever.

AFFECTIONS OF THE GUMS IN RELATION TO OTHER DISEASES.—Dr. Kaczorowski (*Przglad Lekarski*, Nos. 28 and 29, 1884, and *Vratch*, No. 32, 1884) draws attention to a connection existing between gingival affections and certain other diseases. In four of his cases, chronic gingivitis caused the occurrence of hallucinations, melancholia, nervous excitement, and insanity. Extraction of destroyed teeth and appropriate treatment of the inflamed foul gums were followed, in each of the cases, by restoration of health of the nervous system. Further, the author saw several instances where affections of the gum led to general septicæmia. He thinks generally that premature senile debility of the organism may often depend upon dental caries, leading to absorption into the system of septic products of slow decomposition.

A HERMAPHRODITE.—A person calling herself by the ambiguous name of Madame Duplex de Balzac, informs the profession that she (or he) has just arrived from Europe, and "intends to exhibit herself (or himself) before any person who is anxious to enlighten himself on natural science." Dr. William T. Lusk certifies that Mrs. Duplex de Balzac is an example of hypospadias. The generative organs are those of a male, but the general habit of the individual (and this is what makes the case an interesting one), is of the feminine type. The bones are small, the wrists and ankles are slender, the breast, the hair, the complexion, and the voice are those of a female. Dr. William M. Polk states that it is a case of true hermaphroditism.—*Medical Record.*

STIMULANTS FOR THE AGED.—Dr. James L. Tyson (*Medical and Surgical Reporter*) regards it as perfectly allowable to give stimulants to the aged, whose vital powers are impaired or flagging. He says: "In a practice of forty-five years, I have repeatedly saved and greatly prolonged many valuable lives, through the instrumentality of stimulants judiciously administered." Dr. J. Milner Fothergill says: "Alcohol may be used with benefit at bed-time by those who undergo much mental activity, and whose brains are exhausted. Here some alcohol exercises a distinctly soothing effect upon the brain, and procures a sound night's rest, where without it would be a restless, perturbed, uneasy, and unrefreshing slumber. There exists no objection to the use of alcohol under these circumstances; neither is there much probability of the habit growing, except in rare cases where there are probably other determining factors."

The late Professor Samuel Jackson, of the University of Pennsylvania, was consulted many years ago by a gentleman of my acquaintance, then in his fiftieth year, for a complication of maladies threatening early dissolution, prominent among which were vertigo, dyspepsia, languor, debility, etc., etc. His advice was, after a thorough investigation of the case, that half an hour before each meal he should take a tablespoonful of whiskey in a little water. This the patient continued through the remaining years of his life, with renewed health and vigor, and lived comfortably to the age of eighty-six.

INTERNAL URETHROTOMY FOR STRICTURE.—That distinguished veteran, Sir Henry Thompson, tells us, in the *British Medical Journal*, June 14, 1884, that according to his experience internal urethrotomy, completely performed, should be resorted to as the best and safest treatment of stricture as soon as the easy use of the bougie fails to maintain the urethra patent, or to allay signs of irritation in the bladder arising from obstructed urethra. It is the best means not only for relieving urethral obstruction and its painful symptoms, but for ensuring the future sound condition of the organs which lie behind it.

ALIMENTATION OF PATIENTS SUFFERING FROM DYSPHAGIA.—*First.* When there exists both dysphagia and inability on the part of the stomach to retain food, rectal alimentation is invaluable. *Second.* When the stomach is in good condition but deglutition is impossible, the stomach tube must be employed, and the method of its use based on the following principles: 1. The use of a tube of the smallest possible calibre; and 2. The introduction of this tube, not into the stomach, but merely into the œsophagus and past the obstruction, or else past the pharyngeal constrictors.

The following simple apparatus will suffice: A receiver in the form of an ordinary conical-bottomed soda-water bottle, the mouth of which is fitted with a tight india-rubber stopper, having two perforations, through each of which passes a glass tube, one short, the other reaching to the bottom of the bottle, so that all of its contents may be exhausted without including any air. To the short tube is attached a Davidson's air compressor, while the long one is connected with an English flexible woven catheter, of any size from 8-18, by means of about a yard of rubber tubing, the continuity of which is interrupted by an inch of glass tube.

The size of the catheter must depend upon the age of the patient and the nature of the liquid introduced. The catheter should be perforated at its tip.

The patient's mouth being opened and the tongue protruded, the catheter should be carried to the base of the tongue, the patient told to swallow, and as he does so, the catheter pushed into the œsophagus; the larynx may be avoided by using the finger as a guide. Before introduction, the tube may be lubricated with the white of egg, mucilage or even milk. A good plan is to have the patient swallow slowly, before introducing the tube, a drachm or two of pretty thick mucilage. Vaseline, glycerine, or oil are unpleasant, and should not be used.—DR. D. BRYSON DELAVAN, *Medical News*, June 7, 1884.

CHRONIC MYOCARDITIS: CARDIAC HYPERTROPHY.—The records of the Pathological Institute of Munich show that idiopathic hypertrophy of the heart is of much more common occurrence in that city than elsewhere. Spatz found among 638 men 55 affected with so-called myocarditis; among 433 women there were 23 cases; among 290 men between the ages of 30 and 60 years, there were 41 cases of myocarditis, or 14 per cent.; among 144 women at the same period of life, only ten, or seven per cent. Bollinger, finding in most of the cases no anatomical evidences of inflammation or fatty degeneration, regards the hypertrophy as simple or idiopathic. Schmidbauer undertook, by means of exact observations, to establish the extent of this epidemic of cardiac hypertrophy in Munich, upon a statistical basis, and to discover its cause. In 1,000 post mortems there were 46 cases, 32 men and 14 women, of undoubted idiopathic hypertrophy of the heart, as the cause of death. As an associated condition, not as the cause of death, idiopathic hypertrophy was found in 33 other cases, 23 men and 10 women. All cases of hypertrophy due to valvular lesions, or disturbances in the pulmonary circulation, arterial sclerosis, or granular atrophy of the kidney, were excluded. Certain of these cases were to be accounted for by prolonged excessive muscular effort and bodily strain, but the greatest number, especially among suicides, were due to *habitual excesses in beer drinking*, in connection with a true plethora.—Editorial in the *Medical News*, July 5, 1884.

PROGRESS IN ANTISEPTICS.—It is reported that Esmarch now uses metal operating tables at his clinic. All the instruments are said to be nickel plated and to have metallic handles. By discarding wooden articles the great surgeon hopes to diminish the risks of septic infection.

STRANGULATED HERNIA — ASPIRATION — RECOVERY.—J. Leslie Allen, M.D., of Middletown, England, reports in the *British Medical Journal* of November 29, 1884, a case of an unusually large right inguinal hernia which was usually reducible, but on the occasion when he was called, was found to be very much obstructed; and though he diligently applied taxis and tried all the usual accessories, enemata, fomentations, etc., yet he failed to reduce it. The hernia was of great size, filling the scrotum, and felt hard and tense. The symptoms of strangulation manifested themselves, and it was certain the patient would soon sink unless relief was afforded. The surgeon passed an aspirating needle and drew off the flatus, when the gut slipped back. An anodyne was administered and complete rest enjoined, and in a few days the patient recovered. Would it not be well to have recourse to this simple procedure in all cases before operating? It can do no harm if the needle be small; and should it fail, the operation can be at once undertaken.—*Fort Wayne Journal of Medical Science.*

REPORTS FROM THE FRANKFORT MILK CURE.—According to the investigations of Cnyrim (*Arch. f. Kinderh.; Arch. of Pediatrics*), the percentage of mortality among children in Frankfort, under one year of age, from diseases of the stomach and intestines, during the last two periods of five years each, has been almost exactly the same, although the poor population of the city has steadily increased, and the births and deaths during the past five years in the quarter which is chiefly occupied by the poor, have been also growing more numerous. The assumption is, therefore, that during the past five years there has been an improvement in the conditions which relate to the nonrishment of children. The relatively favorable condition of affairs is ascribed by the author in great measure, to the workings of the Frankfort milk cure. That the milk from this establishment is far better than ordinary city or market milk, was shown by a careful comparison which was made by Frankfort physicians. Children who were fed upon milk from the milk cure were almost free from diarrhœa, and gained in weight. Some cases of intestinal catarrh were apparently cured by its use. Such reports do not agree with those which are commonly received concerning the bad effects of artificial nourishment for children. The author thinks that everything depends upon the quality of the milk, and this is so excellent at the Frankfort milk cure, chiefly because the cows at that establishment get only dry fodder, while cows in general get green fodder, or what is worse, the refuse of the kitchen, etc. The uniform character of the milk from dry-fed cows must also be an advantage over the changing character of that which is obtained from green-fed cows, for with the latter the proportions of albuminoids and cellulose changes with the season of the year. The greater expense of feeding upon dry food constantly adds, of course, to the price of the milk, and this makes it unobtainable for many homes.

MALTOSE.—In his admirable little work on "Materia Medica and Therapeutics," Dr. Mitchell Bruce makes this important statement: "Maltose is a form of sugar which does not ferment, and will not give rise to acidity and dyspepsia." In the sadly numerous cases where acidity is caused by ordinary sugar, in malt extract and malted preparations we find a sugar of the highest utility in practice as not liable to acetous fermentation.—MILNER FOTHERGILL, in *Practitioner.*

PNEUMONIA AS AN INFECTIOUS DISEASE.—At the Congress of Internal Medicine, held at Berlin, April 21, Prof. Turgison, from Tubingen, discussed the etiology, pathology and treatment of genuine pneumonia. He mentioned the interesting connection between some meteorological changes, and the more or less frequent occurrence of pneumonia, at least in Tubingen; and the analogy between the etiology of typhus and pneumonia, as shown by the influence of hygienic relations. He favored a *unique* pneumonic poison. Analyzing the clinical manifestations, he discriminated three groups of symptoms: 1. General infection. 2. Implication of the heart. 3. Embarrassment of respiration.

He condensed his essay into the three following theses: 1. Cold or refrigeration is rarely the prime cause of pneumonia. 2. Vigorous persons are not as frequently subjects of pneumonia as the delicate. 3. *Antiphlogos*, in the sense of our predecessors, is to be discarded.—(From the Louisville *Medical News*, August 9, 1884. Reported by Samuel Brandeis, M.D.)

PEDIATRIC APHORISMS.—The following aphorisms of Prof. Letamendi are quoted in *El Dictatem* of May 10, 1884:

1. Children are like the mob; they always complain with reason, although they cannot give the reason why they complain.

2. Always look at the lips of a pale and sickly child; if they are of a deep red color, beware of prescribing tonics internally. At the outset, you may congratulate yourself, but in the long run you will repent of having employed them.

3. As a general rule, a sad child has an encephalic lesion; a furious child, an abdominal one; a soporific child has both, though indistinctly defined.

4. An attendance on children produces in the mind of an observant physician the conviction that the half, at least, of adult transgressors are so through morbid abdominal influences.

5. A sunny living room, a clean skin, and an ounce of castor oil in the cupboard—these are the three great points of infantile hygiene.

6. To dispute the clinical value of tracheotomy in croup is a waste of time. Croup or no croup, if there be a positive obstruction to respiration in the larynx, it is but according to reason to open a way for sublaryngeal respiration. In the days of more knowledge and less nonsense, tracheotomy will be ranked among minor surgical operations.

7. Dentition is a true multiple pregnancy in which the uterus and its fœtuses become petrified in proportion as they grow. It is not the direct or the eruptive pressure, but the lateral pressure of all together that is the most dangerous. It is from this that so many symptoms appear which can in no way be relieved by incisions of the gums. The only recourse against the danger of this transverse pressure is to give the child more nourishment, in the hope that as the general condition is bettered the local condition will also improve.

8. If the incisors of the first dentition are serrated it is bad, but if those of the second formation are the same, it is worse. It foretells a number of lesions arising from deficiency of mineral salts in the tissues. There is one only exception, and it is an important one. When the serrated incisors are seen in strong children in whom the fontanelles have closed early, it is a sign of robust constitution. Instead of a number of small and sharp dentitions, there are a few large blunt ones.

9. To regard the eruption of the teeth as the sole factor in the general process known as the first dentition, is to perpetrate a sort of medical synecdoche. Children get their first teeth because they are at the same time getting a second stomach and a second intestines.

10. The body of a child possesses such a degree of "acoustic transparency" that in cases of necessity or convenience auscultation may be practiced with the hand, converting it into a telephone which will reveal as much to the physician as even his ear could do.

11. In practice it is well to distinguish with precision a case in which disease is due to lumbricoids from one in which lumbricoids are due to disease. For in the former case anthelmintics are of service, but in the latter they do harm.

12. Since, until a child is able to talk clearly, his relations with the physician are purely objective. It is very necessary that we should study as carefully as do the veterinarians the exact correspondence between lesions and the expression of the patient.

13. If you wish to cure rapidly and well joint-disease in infants, you must treat them as you would a conflagration—douches, douches, and more douches, until you have succeeded in extinguishing them.

14. The entire system of the moral relation between children and adults should be changed. To speak to them incorrectly merely because they cannot pronounce well; to excite their fears and arouse their weird imaginations simply because they are easily frightened and impressionable; to stimulate their vanity because they are naturally inclined to be vain—these and other similar actions are not only wrong, but absurd.

15. There is finally a danger to the woman of contracting a vice as yet unregistered in the annals of concupiscence—mastomania, or the sensuality of nursing. When this physiological act degenerates into vice, nursing becomes so frequent as to be nearly continuous, and the result is ruin to both mother and child. Finally, the physician must here, as always, be at once wise, discreet, of good judgment, and firm.

MILK TREATMENT OF DISEASE.—Dr. James Tyson, in the *Jour. Amer. Med. Ass'n* for June, presents the following: No measures in diabetes mellitus are so efficient as the dietetic and of the dietetic treatment none so efficient as an exclusively milk diet. His method is to begin with four ounces of skimmed milk every two hours for the first day. This is sufficient for an adult, and on the second day the quantity is increased to six ounces every two hours, and after a day or two more to eight ounces, thus giving two quarts per day. This amount is quite sufficient for many persons of both sexes with small frames and light weight, but is quite insufficient for others, for whom the quantity may be increased by taking more at a time, or beginning a little earlier in the day and continuing later; or a glass or two may be taken during the night. Or, the interval may be increased to three hours, when still larger quantities must be taken at a time.

The milk must be taken slowly, not less than five minutes occupied in drinking eight ounces. About 60° F. is the best temperature for the milk. The constipating effect of this diet may be relieved by some mild aperient water.

This exclusive milk diet has proved most efficacious in diabetes mellitus, in uric acid gravel, in the contracted kidney of interstitial nephritis, in gastro-intestinal disease, in chronic enteric diseases, and finally, as a remedy against excessive obesity.

The addition of lime water obviates the dyspeptic symptoms which may arise, and peptonized milk will be found necessary when the digestive functions are weak and impaired.

In most cases skimmed milk must be used, but when the digestive functions are equal to it, unskimmed milk may be used.

HYPODERMIC INJECTION OF AMYL FOLLOWED BY EPILEPTIFORM CONVULSIONS.—Dr. Sydney Ringer has noticed the occasional action of the nitrite of amyl upon the heart, and the strange effects sometimes produced upon the nervous centres. He says: "I have seen one case where a woman immediately after a drop dose turned deadly pale, felt very giddy, and then became partially unconscious, remaining so for ten minutes. And again: A delicate woman, after one-thirtieth of a drop, passed in a few moments into a trance-like state." In a case described by Dr. Strahan (*Journal of Mental Science*, July) a chronic maniac, aged 53, had suffered for several days from severe lumbago; a ten minum dose of a 10 per cent. solution of nitrite of amyl in rectified spirits was injected hypodermically. Immediately after the injection the pain disappeared. He got up from the bed, and, at my request, stooped and touched the floor with his fingers. In, as nearly as could be guessed, about a minute and a half, he suddenly became deadly pale, and sank back upon the bed. Then his face, head (bald), and neck became congested, and he was strongly convulsed for about half a minute. The convulsion affected the face and arms strongly, the legs slightly. The teeth were ground, and the breathing was suspended. In a few minutes, after coming out of this fit, he was attacked by a second one, during which the heart's action became very faint. He was made to inhale some chloroform, and the fits did not return. The lumbago entirely disappeared. This observation is interesting, as inhalations of nitrite of amyl have been recommended, both in this country and in Italy, to check the occurrence of epileptic convulsions.—*London Medical Record.*

DR. A. F. KINNE, of Michigan, contributes an article in the *Obstetric Gazette*, on quinine subcutaneously administered. He contends that:

1. A hypodermic injection of the bimuriate of quinia and urea (a fluid ounce represents 480 grains of quinia) is milder and safer than an ordinary injection of the sulphate of morphia, and even less care is necessary in its administration.

2. But if this preparation is unobtainable, an acid solution of the sulphate may be used (℞ Quiniæ sulph., gr. 50; acid. sulph., dil., M 100; aquæ fort., ℥j.; acidi carbolic. M. S. M. Solve).

3. The selection of such areolar spaces as will contain the injection required, without laceration and without tension even. And these will be found not within the parenchyma of the cellular tissue, but through it and beneath it, between the cellular tissue and the parts adjacent.

A NEW BATTERY SOLUTION.—Carl Seiler, in *Medical and Surgical Reporter*, recommends the following fluid as superior for galvano-cautery batteries, or, diluted one-half with water, for the ordinary medical batteries:

Bichromate of potash	2 pounds.
Hot water	½ gallon.
Sulphuric acid	½ gallon.

Dissolve the bichromate of potash in hot water, and when cool add to it the sulphuric acid. This should be mixed in an earthen vessel, as the sudden evolution of heat is very apt to break a glass bottle. When cold, place the mixture, which will be quite thick, in a glass funnel, the tube of which is partly closed with asbestos, and drain off all mother liquid, which is a saturated solution of sulphate of potash. Then redissolve the parts remaining in the funnel in one and one-half gallons of water, and add to it two quarts of sulphuric acid if the fluid is to be used for the galvano-cautery battery, but if it is for the ordinary medical battery one quart of sulphuric acid is sufficient.

SOME CURIOUS MORTALITY STATISTICS.—Dr. William Pratt, of London, in his address to young men, gives these facts: According to statistics, the married life is not only the purer, producing the minimum of evil-doers and criminals, but it is by far the most healthy. Take the male sex, and it is seen that from twenty-five to thirty years of age, 1,000 married men furnish six deaths; 1,000 bachelors furnish ten deaths; 1,000 widowers furnish 22 deaths. The figures, however, become very unfavorable if the marriage be contracted before twenty. Out of 8,000 young men married before twenty, their mortality has been found to be, before marriage, only seven per 1,000; after marriage, 50 per 1,000. With respect to the female sex we find a similar advantage of marriage over celibacy, but on the same condition. If young girls be turned into wives before twenty a like mortality befalls them which befalls the other sex. Everywhere young married people from eighteen to twenty years of age die as fast as old people from sixty to seventy years of age. The common sense and common law of Western Europe have, with perfect justice, marked twenty-one as the age of maturity. After that epoch, however, marriage should be contracted as soon as practicable. It is the healthiest and the happiest life—the best for the individual and for the community.

NITROUS OXIDE AND CHLOROFORM.—Nitrous oxide and ether are frequently administered in combination, or rather in succession, as a means of producing anæsthesia. The employment of a combination of nitrous oxide and chloroform has been recently advocated by M. De St. Martin. Experiments on animals led him to prefer the mixture of eighty-five volumes of nitrous oxide with fifteen volumes of oxygen and six or seven grams of chloroform added to each hectoliter. This mixture causes anæsthesia very rapidly, and the period of excitation is suppressed; the chloroform, moreover, being much diluted, does not irritate the air-passages. The working zone of this mixture is far greater than that of chloroform alone.

THE HYGIENE OF OCCUPATIONS.—According to Dr. George H. Rohé, in a paper read before the American Public Health Association, figures showed that cultivators of the soil had a good expectation for a long life. Those engaged in the manufacture of chlorinated lime were subject to chronic chlorine poisoning. Persons engaged in the vulcanization of india-rubber were very much troubled with pneumonia, and had a predisposition to rapidly succumb to consumption. Lead-workers suffered from poisoning, and painters were especially liable to the same disease. Mirror-makers, fulminate-makers, hatters, and others inhaling dust were liable to consumption, and brass-workers to a peculiar disease termed brass-founders' ague. Stone-cutters in Germany live to the average age of $36\frac{3}{100}$ years, but the figures showed that in this country their average length of life was $40\frac{20}{100}$ years. Rag and wool-sorters were liable to a peculiar disease, which was probably anthrax. The average life of millers, according to Hirt, was $45\frac{1}{10}$ but according to the Massachusetts figures $57\frac{14}{100}$. Workmen in grain-elevators suffered from catarrh, and brush-makers were peculiarly liable to phthisis. Firemen on steamers suffered from pulmonary diseases and from heart disease. Statistics showed that brain-workers had a higher expectation of life than any other class of men.

INFLUENCE OF AGE ON THE LABOR OF PRIMIPARÆ.—Kleinwaechter has studied this subject very thoroughly, not solely with reference to the length of labor, but with a view of determining the liability of primiparæ of various ages to antecedent menstrual disturbances, to the various accidental

complications of pregnancy, and to puerperal disease. He has also estimated the relative frequency of instrumental interference, relative morbidity and mortality, the liability to abortion, and the influence of the mother's age on the weight and sex of children. The materials for study he found in the records of 930 cases of primiparæ in his clinic at Innspruck. These cases he divided into three groups, namely:

I. 16–19 years of age.....111 cases.
II. 20–29 " " .....694 "
III. 30–41 " " .....115 "

These groups he designated as the young, the middle-aged and the old respectively. From his study of these cases he draws the following conclusions:

1. Accidental complications which have nothing to do with pregnancy occur least often in the youngest primiparæ and most frequently in the old.

2. Ailments attributable to pregnancy are most frequent in the old, and next most frequent in the young.

3. Hemorrhages occur in the course of pregnancy most frequently in the young, and least frequently in the old.

4. Labor is most protracted in the old; in this respect the young stand next.

5. Inefficient pains are rarest in primiparæ in the bloom of sexual life—*i.e.*, from 20 to 29—and oftenest in the old.

6. Therefore, forceps must be used most often in the old, least often in the middle-aged.

7 The lengthening of the labor of primiparæ with the increase of age occurs chiefly in the first stage. The second stage is rarely affected; the third not at all.

8. The mortality after forceps operations on primiparæ increases with the age.

9. The older the primipara, the greater is the danger of perineal laceration.

10. The older the primipara, the more likely a post-partum hemorrhage, though the frequency of the hemorrhage is not so great as hitherto supposed.

11. With increase of age the disposition of primiparæ to affections of the kidneys increases.

12 Frequency of œdema without kidney troubles also increases with the age.

13. The older the primipara, the less danger of mastitis, and the less likely her ability to suckle.

14. The old most frequently, the middle-aged less frequently, are subject to puerperal fever and mania.

15. The morbidity and mortality are highest in the old, and lowest in the middle-aged.

16. Spontaneous premature labor is most frequent in the old primiparæ, and rarest in the middle-aged.

17. With increased age the frequency of abnormal positions of the fœtus increases.

18. The older the primipara, the more likely is she to bear a boy, excepting only those between twenty and twenty-one, who bear more girls than boys.

19. The liability to twin pregnancy in primiparæ increases in proportion to their age.

20. The older the primipara, the heavier and longer is the child, and sooner does the umbilical cords fall off, while in the youngest it falls off latest.

21. With increase of age in primiparæ the frequency in deformed children decreases.

22. The mortality of first-born children increases with the mother's age. Among the oldest primiparæ the infant mortality reaches a considerable height.—*Boston Medical and Surgical Journal.*

OBSERVATIONS ON THE DAILY RANGE OF TEMPERATURE.—Dr. Carter lately read a paper to the Liverpool Medical Institution, based on two series of observations made on the night sisters and night nurses of the Royal Southern Hospital, during a week in 1879 and 1882 respectively. These were primarily undertaken for the purpose of discovering whether inversion of the habits disturbed the periodic nightly depression and daily elevation of temperature said to characterize ordinarily healthy people. *Dr. Carter's conclusions were that there was such oscillation; that it was not altered by change of habit; that a daily range, amounting in a few instances to 3° Fahr., occurred; that an axillary temperature of 96° at some period of the night was quite common, and consistent with good health, and that the great diurnal wave was but slightly affected by food.*

THE HUMAN WALK.—M. Marey has drawn much attention lately to the "human walk." The most practical deductions from his earlier experiments was that low heels have a very favorable influence on the pace at which a person can walk. He has now found that the rhythm of the step has a very important influence on the speed. The rhythm was studied by means of an electric bell, actuated by a pendulum of variable length, to enable the subject to keep exact time, and the distance traveled was recorded on the podograph by electric signals sent along the wire at every fifty metres traversed. M. Marey finds that the length of the step increases little until sixty-five steps per minute are taken, and afterward decreases as a higher rhythm is reached. The speed of travel increases with the acceleration of the rhythm up to eighty-five steps per minute, then decreases at higher rhythms.

SECONDARY SUTURE OF THE MEDIAN NERVE.—From the *Lancet*, July 19, 1884, we learn that M. Tilleaux has related two cases of secondary suture of the median nerve, followed by rapid restoration of the functions of the parts depending upon it. The first was a young girl who cut the front of her wrist while cleaning some windows. The wound healed without suture of the nerve being performed, and there remained complete paralysis of the parts supplied by it. Incapable of working, she applied for treatment. The ends of the nerve were found about a centimetre distant from each other, the central one bulbous, and the peripheral atrophied. They were cut so as to present a fresh equal surface, and carefully drawn together with a hair suture, and the part properly dressed in extreme flexion. Two days after the operation sensibility began to return, and in six weeks' time sensibility and motive power were entirely restored. The other was a like case, only of fourteen years' standing, and was entirely cured.

ONE OF THE NEW REMEDIES.—According to *The Journal of Chemistry*, menthol, the substance recently introduced in the treatment of headache and neuralgia, is likely to prove a valuable addition to the remedies for those ailments. It is a white, semi-crystalline body with a strong, burning odor of peppermint, and is usually made into a small cones mounted on a wooden handle. If it is rubbed over the locality of a headache or other pain, a burning sensation is first felt, followed by a feeling of refreshing coolness and temporary relief of the pain. The liquid oil of Japanese peppermint has long been used in Japan and China for this purpose, menthol being simply the solid constituent of this oil. Chemically considered it is a camphor, differing only from ordinary camphor by the addition of four atoms of hydrogen. Its medicinal effects are probably due to the counter-irritation it sets up. The strong, agreeable odor of peppermint may also have some effect on the nerves.

THE ALEXANDER-ADAMS OPERATION FOR DISPLACEMENT OF THE UTERUS.—In the *Glasgow Medical Journal* (August), Mr. Robert Miller reports two cases operated on at the Town's Hospital, Glasgow. The operation consists in making a simple skin incision over the inguinal ring, gathering up the ends of the round ligaments and cleansing them out sufficiently to restore the wound to its normal position. Finally, the ends of the ligaments are stretched to the edges of the wounds. Both cases were successful. Dr. Adams considers the results better in cases of prolapse than in cases of old retroversions or flexions.

PUERPERAL FEVER.—Dr. T. A. Mitchell, in the *British Medical Journal* of April, 1884, relates the progress and treatment of a very severe case of puerperal fever, in which the lochia were entirely stopped, and at one time the temperature reached 108° Fahr. He employed the use of simple lime water, injecting it thoroughly into the uterus by the means of a male gum elastic catheter and common syringe. This was repeated once per day. He has employed the same treatment several times with very favorable results.

PICTURE OF A GENUINE FUNCTIONAL EPILEPSY.—Easily influenced by manifold impressions, whether of medicaments or upon nerves of general or special sensation; occasionally quasi-periodical; occasionally inter-convertible with migraine; often occurring at long intervals, generally at very irregular intervals; occasionally manifesting itself to all appearance, in a solitary convulsion; occasionally beginning in early childhood or infancy; at times seemingly stimulated to activity by malaria; possibly caused by special reflex irritations.—LANDON C. GRAY, *N. Y. Med. Jour.*, July 5, 1884.

A HAIR TONIC.—The best remedy to stimulate the growth of hair, and to keep the hair from coming out, is uvedalia. If the scalp is dry and harsh, the ointment of uvedalia may be rubbed up with an equal part of vaseline and scented. If the sebaceous secretion is free, the tincture may be employed, adding bay rum, one or two parts. In either case the scalp is thoroughly rubbed with the remedy once or twice a day.—*Ecl. Med. Journal.*

THE TEMPERANCE OF THE DANES.—It has been a matter of frequent remark that in countries where *wine* is freely consumed by all classes, to the lesser use of the stronger alcoholic drinks, there is comparatively little intemperance. This view gains additional confirmation from the remarks of the correspondent of the *Medical Press* at the late International Medical Congress, who says: "I was very much struck here by the great temperance of the people. Wine is taken. At Kronsberg 'there was water, water everywhere, but not a drop to drink.' The tables were lined with wines, clarets, hocks and champagnes, but there was not a single water carafe. Though this was the case, and though only wine was to be obtained to quench the thirst, yet I did not see a single person out of the 2,000 in the slightest degree with signs of elevation. I watched the people at Tivoli. There was the same moderation; wine was taken, intoxication was absent. On this occasion it might have been expected that the bounds of sobriety would have been passed."

THE VAPOR OF GLYCERINE IN OBSTINATE COUGHING.—This remedy is highly spoken of by M. Trastour, in the *Gaz. Méd. de Nantes.* He evaporates two ounces of glycerin in a flat dish, and allows the patient to inhale the vapor. Carbolic acid may be added to advantage. This treatment is especially applicable to phthisical patients.

MISCELLANY.

—Cholera is said to have reappeared at Toulon.

—The Indiana Institute of Homœopathy meets in Indianapolis, May 19 and 20.

—Kircher originated the germ theory of infectious diseases two hundred years ago.

—As a cheap but useful laxative, Prof. Parvin advises the use of an oz. of bran, in a little water, taken at bedtime.

—Specimens of urine containing tube-casts can be preserved by the addition of a minute quantity of corrosive sublimate.

—Dr. Weber, of Darmstadt, has used apomorphine, in doses of one-half a grain, three times a day, in chronic asthma, with success.

—Prof. Doremus, of this city, is said to have an income of $25,000 per annum from chemical analyses of patent medicines and other similar articles.

—It is said that 35,000 physicians are wanted in European Russia alone. This country could easily furnish them and without robbing herself either.

—The *Century Magazine* will hereafter issue on the first day of the month of which each bears date, and the edition for May will reach the enormous number of 250,000!

—The Faradic current, the positive pole to the affected part, for ten to fifteen minutes repeated daily, if necessary, is said to allay pain and reduce the inflammation in felon.

—It is a fact not so generally known as it should be, that a small stream of water poured from a considerable height on the scrotum will cure any case of simple congenital hydrocele.

—The New York Homœopathic Medical College, at its commencement, April 16, had a graduating class of forty. The Alumni dinner was the occasion of pleasant reunion of old friends.

—Leucorrhœa in young girls, of from ten to sixteen years old, has been traced, by a correspondent of the Boston *Medical and Surgical Journal*, to excessive indulgence in roller skating.

—Recent tests on the limit of hearing, arrived at by the use of a powerful metal stem, actuated by steam, reached 72,000 vibrations per minute, or nearly double the limit reported by Helmholtz.

—It is said that water may be purified by passing it through a centrifugal machine. Should experience prove the claim, it will be quite easy to devise means to practically accomplish the object.

—According to Dr. Alfred Carpenter, there is no possible chance of relief to those who are inclined to the lithic acid diathesis, if they arrest oxidation by the use of stimulants or narcotics of any kind.

—"In War Time," by Dr. S. Weir Mitchell, "Charley Kingston's Aunt," by Sir Henry Thompson, and a novel by Dr. Milner Fothergill, are the latest contributions to professed fiction by medical men.

—M. Gavy, of Paris, has invented an instrument for determining the degree of immobility of the brain in the cranium, and has shown it to the different scientific and medical bodies. It is termed a kinesiometer.

REMOVALS.—Dr. C. M. Conant has removed from Middletown, New York, to Orange, New Jersey. Dr. R. G. Clark has removed to No. 134 West 126th street; Dr. Geo. E. Tytler to 40 E. 126th street, N. Y. City, and Dr. C. H. Bronson to 438 Pacific street, Brooklyn, N. Y.

—Dr. Henry B. Millard has been recently elected a foreign corresponding member of the Société d'Hydrologie Médicale, of Paris, and of the Verein Deutscher Aerzte, of Prague, the first American to receive these honors.

—An instrument is in use in Germany, by means of which the urine in the bladder can be collected from the mouth of the ureter on each side, so as to enable the surgeon to determine which kidney is the seat of suppuration or other trouble.

—According to Dr. William C. Jarvis, remarkable intellectual faculties are likely to be accompanied by nasal catarrh, the encroachment of the cranium upon the skeleton of the face causing deviation of the nasal septum and thereby catarrh.

—In lecturing upon post-partum hemorrhage, Prof. Parvin said that it is not always advisable to turn out the clots, but if they are loose, then he would remove them; otherwise, if causing pressure, they would, to some degree, prevent bleeding.

—Some remarkable results are reported in relief and even cure of certain forms of insanity, by occupation in some kind of work. Most of our asylums for insane are taking advantage of the circumstances and are providing occupation suitable to particular cases with good effects.

—Dr. Detmold, of New York, regards as a pathognomonic sign of syphilis, a prominent œdema over the anterior surface of the tibia, in cases of periostitis of that bone. In no other case in all his experience has he ever seen it entirely disappear, and hence its great diagnostic value.

—The *North American Review* has established a department of "Comments," which appears in each number, discussing the most advanced themes of the day in a masterly manner, by brilliant minds, from a variety of stand-points. This new departure adds greatly to the value of this leading periodical.

—The *Polyclinic* remarks that a curious inference from the latest results of Koch's investigation is that decomposing organic matter does not seem to have the direct causal relation with cholera formerly supposed. The micro-organisms characteristic of putrefaction interfere with the multiplication of the comma bacillus.

—During the last few months practitioners in Glasgow have had an opportunity of studying two very typical cases of leprosy, in which the signs of all the varieties of the disease were manifest—the tubercular, macular, anæsthetic and ulcerating forms. At one of the societies, also, the leprosy bacillus has been exhibited.

—Dr. Garrett Anderson, a sister of the wife of Prof. Fawcett, and Dr. Arabella Kenealy, a daughter of the late Dr. Kenealy, a brilliant advocate and finished scholar, are said to be the two most distinguished lady practitioners in London. Both of them enjoy large and lucrative practices, and are said not to be inferior in ability to doctors of the highest standing of like age and experience.

—*Texas Siftings* tells of the way doctors collect their bills down there. Dr. Blister presented his bill of $150 to Moses Shaunberg. Moses was shocked at the size. "Vy, mine Gott," he exclaimed, "two funerals in one family would not have cost me so mooch as dot." "It's not too late to have a funeral yet," returned the urbane doctor, as he brought out an army size revolver. Moses took the hint. The *Medical Age* wonders how a little of that would work in this latitude.

—Dr. A. L. Loomis says: "A man can take two or three glasses of stimulants through the day as he may feel an inclination, and he may continue this for perhaps twenty-five years without any harm accruing from it; but when this man reaches that period of life when the vital powers are on the decline, he suddenly feels himself growing old before his time, for he has all these years been laying the foundation for chronic endoarteritis. I believe that fifty per cent. of all diseases arise from the use of alcoholic stimulants."

—The Homœopathic Medical Society of Ohio will hold its annual meeting at the Pulte Medical College, Cincinnati, May 12 and 13. The courtesy and hospitality of the profession in Cincinnati will be exerted to make the gathering full of social pleasure, and the many able practitioners in the State will add to the interest of the meeting by their discussion of scientific subjects connected with our daily work. The Musical Institute will be in session the 13th and 14th, and will materially add to the pleasure of visitors to the city.

—The following case, illustrating the effect of cocaine, is taken from the *Wiener Medicinische Wochenschrift*. On December 25, last, Dr. Weiss, of Vienna, was called in to Prof. S., who had scalded his eyes, forehead, nose, cheeks and upper lip, owing to an explosion of the apparatus during an inhalation; pain was very severe. He first ordered linen soaked in oil to be laid on, and oiled bandages on the top of these. Then he ordered the application of carron oil and a two per cent. solution of hydrochlorate of cocaine. As soon as the scalded spots were painted with the above named solution the pain disappeared, and did not return.

—*The North American Journal of Homœopathy*, started thirty-three years ago by Dr. E. E. Marcy, ceases to exist with the present number. Dr. Lilienthal, the editor, in retiring from the editorial chair, which he has filled for so many years with marked ability, complains of the difficulty of obtaining the necessary literary contributions, thus throwing upon the editor the labor of filling the pages in a great measure with his own articles and translations. The Journal publishes in its present number the prospectus of what is called a new series of the *North American*, in monthly form, by a Journal Publishing Club. The Club has no connection with the old publisher or editor, and the Journal will be a new venture in the field of journalism.

—When Mr. Fawcett, the late Postmaster-General of England, returned two years ago from the door of death, says the *Pall Mall Gazette*, he remarked that, whatever else his illness had done for him, it had at least freed him from the fear of death. Like many men of robust physique, Mr. Fawcett at one time entertained a dread that death would be preceded by a fierce convulsion—a veritable death agony. During his former illness, as he lay for days in the last stage of prostration awaiting death, he felt entirely free from any physical fear. The heart would simply cease to beat as a watch that has run out ceases to tick, and all would be over. Death would be no wrench, but simply the cessation of life. Such, at least, was the conviction which Mr. Fawcett brought back with him from the shadowy confines of the grave.